2011 VAPAHCS Cancer Program Annual Report

With 2010 Data

VA PALO ALTO HEALTH CARE SYSTEM

Cancer Program-111 ONC, 3801 Miranda Avenue, Palo Alto, CA 94304-1207

Contents

Multidisciplinary Cancer Care Committee Membership 2010-2011

PHYSICIAN MEMBERS

Committee Chairman: Harlan Pinto, MD
Cancer Liaison Physician: John Leppert, MD
Dental: Lori Beeninga, DDS
Dermatology: Susan Swetter, MD
General Surgery: Sherry Wren, MD
Hepatology: Ramsey Cheung, MD
Medical Oncology: Kristen Ganjoo, MD; Ina Rhee, MD
Medical Hematology: Beth A. Martin, MD
Pathology: Robert Rouse, MD
Radiology Service: John Drace, MD
Urology: John Leppert, MD

ALLIED HEALTH MEMBERS

AIC: Enna Trevathan, RN, DNP, CNL, MBA
American Cancer Society: Janet Chang, MPH
Cancer Program: Carole Fong, BSN, RN; Hiep Doan, CTR; Maria Tham
Chief of Staff's Office: Jaclyn Hiura, Health System Specialist
Community Health Service: Wanda Tacey, RN, MS
ENT: Ella Benadam-Lenrow, RN
General Surgery: Lynne Dempsey, RN, CNS; Nina Bellatorre, RN, CNS
Hematology: Mary L. Thomas, RN, CNS, AOCN
Medical Onc: InPatient: Connie Yabes-Sabolboro, RN, CNS, AOCN
Medical Onc: Out Patient: Peter di Donato, PA
Pain Management: Janette Elliott, RN, CNS, AOCN
Pharmacy: Raj Joshi, PhamD; Kyong Kang
Psychology Service: Veronica A. Reis, Ph.D
Quality Management: Catherine Schiavone, RN, BSN, Colleen Oelkers, RN
Social Work Services: Karen Chwick, LSCW
Women Veterans: Samina Iqbal, MD; Ann Thrailkill, RNP, MSN, CNS

Mission Statement

The mission of the Multidisciplinary Cancer Program is to decrease the morbidity and mortality of patients with cancer and improve the quality of patient care by:

- Early diagnosis
- Pretreatment Evaluation
- Physician Staging
- Nutritional Assessment
- Optimal treatment and Palliation
- Psychosocial Support
- Rehabilitation
- Pastoral Care
- Hospice Care for Terminally Ill Patients
- Long Term Surveillance for Recurrent and Multiple Primary Cancers
- Research in Cancer Prevention, Cancer Biology, and Cancer Treatment

The Cancer Program, through the Cancer Care Committee, will demonstrate efficiency in terms of quality and outcome of all oncology services provided to the cancer patient. This will be achieved through establishing annual goals and objectives for the clinical, educational, and programmatic activities relating to cancer and the cancer patient.

Chairperson's Summary

I am pleased to present the VAPAHCS Multidisciplinary Cancer Care Program's Annual Report for 2011. This Annual Report provides a comprehensive and detailed overview of the cancer related services and activities available to cancer patients in the VA Palo Alto Health Care System. Overall, we are proud to acknowledge everybody's commitment to our patients, and beginning with the Cancer Registry statistics for 2010, the 2011 Annual Report is an impressive survey and summary of our dedication to quality care through the American College of Surgeon's Commission on Cancer process.

The cancer program personnel at the VA Palo Alto Health Care System facilities have done an amazing job in working together across many disciplines to provide patient centered multidisciplinary cancer care. In November of 2010 our program was surveyed by the American College of Surgeons' Commission on Cancer (CoC) and we received a 3-year accreditation with 5 commendations. So far in 2011 we have participated in the 3rd generation cancer collaborative focusing on lung cancer while sustaining the improvement in patient satisfaction with the chemotherapy process accomplished in 2010. The successful start of the cancer survivorship clinic put us in superb position to meet the new 2012 Commission on Cancer standard relating to cancer survivorship.

During 2010, the number of new veterans served by the cancer program staff increased. The cancer registry caseload increased by 12% to a total of 896 new cases. The number of analytic cases (those both diagnosed and treated here) increased by 7% to a total of 716 new cases. Prostate cancer is still the most common cancer seen here and in 2010 the number of cases increased by 14%. New lung cancer cases increased 38% from 90 new cases in 2009 to 125 new cases in 2010.

Our efforts to provide state of the art care including screening, diagnosis, treatment, survivorship and palliative care ensures that veterans with cancer get the best care available. The members of the Cancer Care Committee and all other contributors to this Multidisciplinary Committee are to be congratulated on another outstanding year.

Harlan A. Pinto, MD
Chief, Medical Oncology Section
Chair, Cancer Care Committee

Report from the Cancer Liaison Physician

The Cancer Committee at the Palo Alto Veterans Health Care System (PAVAHCS) is a group of individuals dedicated to the entire spectrum of care for veteran patients with cancer. It is a multidisciplinary group with physician representation including but not limited to medical, surgical, radiation oncology, pathology, radiology, hospice, dermatology, gastroenterology, and pain service. In addition there is broad non-physician representation including nursing, social services, pastoral care, cancer registry, psychology, quality management, the Chief of Staff's office, and a representative from the American Cancer Society. Many other representatives from the hospital give time and effort to insure the care of the patients. Please refer to the entire cancer committee membership list for a total listing. The entire cancer committee meets quarterly with monthly administrative meetings by an executive committee.

As the Cancer Liaison Physician, I have the opportunity to serve as a clinical champion of efforts to improve the cancer care for Veterans at the PAVAHCS. This work is often "behind the scenes" and may go unrecognized. Members of the Cancer Committee have worked over the past year as part of VA collaborative projects to improve the care in head and neck cancers, as part of a regional lung cancer performance improvement project, to facilitate clinical trials being offered to Veterans with cancer, and to improve cancer staging at PAVAHCS. The Cancer Program received a 3 year accreditation from the American College of Surgeons' Commission on Cancer in 2010. This is longest period of accreditation offered and is tremendous accomplishment for all involved in the care of Veterans with cancer. I would like to take this opportunity to thank everyone on behalf of the committee for all of their efforts.

In the last year we have completed a number of exciting community outreach projects. I would like to outline some of the year's additional accomplishments.

Cancer Survivors Day: Many patients with cancer discover that the impact of a cancer diagnosis does not end after it is treated. Recognizing the need for a supportive care system, the Cancer Care Committee, in coordination with the American Cancer Society, held Cancer Survivors Day on September 24, 2010, to recognize and celebrate our cancer survivors. Nearly 200 cancer survivors and their guests were in attendance. Survivors were also offered a survivorship plan (optional), which outlines the continuing care and supportive services that they may expect to receive as part of their cancer diagnosis.

CANCER SURVIVORS DAY – HELD SEPTEMBER 24, 2010

Cancer Survivorship Clinic: Connie Yabes-Sabolboro, RN, has led an effort to establish a dedicated clinic that addresses the issues of cancer survivors. She has worked to secure clinic space and coordinated provider schedules in order to make this clinic a reality. The clinic will open its doors and will initially care for lung cancer survivors at least 5 years from their diagnosis with plans to expand the program in the future.

Daffodil Days: In coordination with the American Cancer Society in excess of 100 veteran cancer patients in the clinics, hospice, and in patient wards received the gift of hope in March 2010.

Cancer Support Group: A group of survivors and families meet monthly at the hospital to discuss cancer, treatment options, and survivorship issues.

John Leppert, MD
Cancer Liaison Physician

Acknowledgements

This 2011 Cancer Program annual report with 2010 Tumor Registry Data and other components activities was prepared to reflect our 2010 efforts to enhance the quality of the VAPAHCS Cancer Program and, thereby the quality of care for the cancer patients.

It is my pleasure to inform you that in 2010, the VAPAHCS Cancer Program received successful accreditation for a full 3 years with commendations in the Commission on Cancer (CoC)'s accredited program. The staff at VA Palo Alto Cancer Program continues to diligently monitor all aspects of the standard requirements for the CoC-accredited programs to ensure compliance with American College of Surgeons (ACoS).

As an accredited program, the Cancer Program at VA Palo Alto under the excellent leadership of the Cancer Care Committee Chairman, Dr. Pinto, Cancer Liaison Physician, Dr. John Leppert and all the Cancer Care Committee members have committed and dedicated to provide high quality cancer care for the patients.

In the coming year, our cancer program will face challenges as we gear our program to meet new CoC standards, as well as other challenges (refer to Tumor Registry report for details). We need everyone's assistance more than ever to continue providing education and training opportunities for the Cancer Program staff. Your continued support has a profound impact on the success of our participation in CoC's accredited program and strengthens our commitment to providing the best possible care for our patients.

We would like to acknowledge our appreciation and thanks to the members of the Multidisciplinary Cancer Care Committee, the Cancer Conferences, the Clinical staff, the patients and American Cancer Society representatives and all those who have contributed to this report for their time, efforts and support.

We also thank the Volunteer Service for providing us with students, community and Veteran volunteers to work with us on special projects. They provide excellent clerical, computer data entry and overall assistance in the Cancer Program.

Last but not least, we wish to express our appreciation to the Information Resource Management Service staff for their ongoing technical support with our computerized cancer registry system.

Carole Fong, BSN, RN
Cancer Program Coordinator

TUMOR REGISTRY REPORT - 2010 DATA

The Tumor Registry at VA Palo Alto Health Care System (VAPAHCS) is a data system designed for the collection, management, analysis and follow up of data on patients with a diagnosis of reportable neoplasm. It is one of the required components of National Cancer Strategy under VHA Directive 2003-2004 Policies and American College of Surgeons (ACOS) accredited cancer program. Data collection abstracted for each case comprises information on demography, diagnostic procedures, stage of neoplasm, first course treatment, subsequent treatments, and lifetime annual follow-up.

The data captured and submitted in accordance with the guidelines and procedures are set forth by the ACOS's Commission on Cancer, the State of California, the SEER (Surveillance, Epidemiology and End Results) of the National Cancer Institute and the VA Central Cancer Registry (VACCR). Tumor registry data is vital for programmatic and administrative planning and a valuable resource for research investigations.

The VAPAHCS is accredited by the Commission on Cancer as a Teaching Hospital Cancer Program. Its Cancer Program compliance with the Commission on Cancer standards is committed to providing the best in cancer diagnosis and treatment. All patients with reportable neoplasm are followed up in the Tumor Registry. Follow-up data includes neoplasm status (free or residual/progressive disease), recurrences, subsequent treatment, and vital status.

The Reference Date is January 1, 1977. It refers to the date that all reportable cases were included in the Tumor Registry before the Cancer Program at VAPAHCS was accredited by the ACOS Commission on Cancer. Since that time, over 19,000 reportable cases have been added to the Tumor Registry. The caseload for 2010 was 896 cases, including 716 analytic cases (diagnosed and/or treated here), and 180 non-analytic cases (initially diagnosed and treated somewhere else, presented due to recurrence or progressive diseases). The analytic cases have increased continuously from 577 cases in 2007 to 716 cases in 2010.

2010 was actually a challenging year because there were major data changes and an increase in reportable cases. Major data changes were to comply with AJCC Cancer Staging Manual 7th Edition, Collaborative Stage Data Collection System (CSv2) and Hematopoietic & Lymphoid Neoplasm New Reporting & Coding Rules. Non-analytic cases with treatments for recurrence or progressive diseases are reportable. Those changes aimed to improve quality of data in order to use in studies to understand neoplasm, improve treatment, increase survival, and improve quality of life for the patients. The Tumor Registry has continuously adapted to meet the changing demands.

Data search and cancer-related information is available. The Tumor Registry processed 19 requests for neoplasm data in 2010. For further information in regards to the data, the registry personnel may be reached at (650) 493-5000 Ext. 63223.

Hiep Doan, CTR
Tumor Registry

2010 VAPAHCS CANCER FREQUENCY BY COUNTY (Analytic and Non-Analytic)

FROM OUTSIDE CALIFORNIA

Nevada	24
Arizona	15
Oregon	3
Idaho	2
New Mexico	2
Texas	2
Alaska	1
Hawaii	1
Utah	1
Washington	1
	52

FROM CALIFORNIA

Santa Clara	262
San Joaquin	83
Alameda	73
Stanislaus	71
San Mateo	66
Monterey	62
Santa Cruz	53
Fresno	29
Tuolumne	26
Contra Costa	15
Tulare	15
Calaveras	14
Madera	10
Merced	10
San Benito	7
Solano	7
Amador	3
El Dorado	3
Kings	3
Mariposa	3
Nevada, Ca	3
Shasta	3
Inyo	2
Kern	2
Lake	2
Los Angeles	2
Sacramento	2
San Francisco	2
Mendocino	1
Modoc	1
Mono	1
Orange	1
Placer	1
Plumas	1
San Diego	1
San Luis Obispo	1
Sonoma	1
Tehama	1
Yuba	1
	844

2010 VAPAHCS Cancer Frequency by Primary Site

Site Group	Total Cases	Class		Sex	
		Analytic	Non-Analytic	Male	Female
ALL SITES	**896**	**716**	**180**	**870**	**26**
C00 - ORAL CAVITY/PHARYNX					
LIP	1	1	0	1	0
TONGUE, BASE	4	2	2	4	0
GUM	1	1	0	1	0
FLOOR OF MOUTH	7	5	2	7	0
PALATE	1	1	0	1	0
PAROTID GLAND	1	1	0	1	0
PHARYNX	26	21	5	25	1
SUBTOTAL -	41	32	9	40	1
C15 -DIGESTIVE ORGANS					
ESOPHAGUS	29	26	3	29	0
STOMACH	8	8	0	8	0
SMALL INTESTINE	4	3	1	4	0
COLON	44	37	7	41	3
RECTOSIGMOID JUNCTION	5	2	3	5	0
RECTUM	29	23	6	29	0
ANUS/ANAL CANAL	4	4	0	4	0
LIVER	31	28	3	31	0
GALLBLADDER	3	1	2	3	0
BILARY TRACT	4	4	0	4	0
PANCREAS	18	14	4	18	
SUBTOTAL	179	150	29	176	3
C30-RESPIRATORY SYSTEM/INTRATHORACIC ORGANS					
LARYNX	11	9	2	11	0
TRACHEA	0	0	0	0	0
LUNG/BRONCHUS	125	96	29	123	2
THYMUS	2	1	1	2	0
HEART/MEDIASTINUM/PLEU	1	1	0	1	0
SUBTOTAL	139	107	32	137	2
C40-BONE/JOINT/CARTILAGE					

BONE/JOINT/ARTICULAR	4	2	2	4	0
SUBTOTAL	4	2	2	4	0
C42-HEMATOPOIETIC/ RETICULOENDOTHELIAL					
HEMATOPOIETIC/ RETICULOENDOTHELIAL	40	33	7	40	0
SUBTOTAL	40	33	7	40	0
C44-SKIN (EXCL. REPRODUCTIVE)					
SKIN	85	77	8	84	1
SUBTOTAL	85	77	8	84	1
C49-CONNECTIVE/ SUBCUTANEOUS/ OTHER SOFT TISSUES					
CONNECTIVE/ SUBCUTANEOUS	4	3	1	4	0
SUBTOTAL	4	3	1	4	0
C50-BREAST (EXCL. SKIN)					
BREAST	9	8	1	3	6
SUBTOTAL	9	8	1	3	6
C51-FEMALE GENITAL ORGANS					
CERVIX UTERI	6	3	3	0	6
UTERUS, NOS	2	2	0	0	2
OVARY	1	1	0	0	1
SUBTOTAL	9	6	3	0	9
C60-MALE GENITAL ORGANS					
PENIS	3	3	0	3	0
PROSTATE GLAND	187	142	45	187	0
TESTIS	4	3	1	4	0
SUBTOTAL	194	148	46	194	0
C64-URINARY TRACT					

KIDNEY	49	40	9	48	1
RENAL PELVIS	2	1	1	2	0
BLADDER	54	40	14	54	0
SUBTOTAL	105	81	24	104	1
C69-EYE/BRAIN/OTHER					
EYE/ADNEXA	1	1	0	1	0
MENINGES	7	7	0	7	
BRAIN	13	10	3	12	1
SPINAL CORD. CRANIAL NERVES	1	1	0	1	0
SUBTOTAL	22	19	3	21	1
C73-THYROID/OTHER ENDOCRINE					
THYROID GLAND	3	2	1	2	1
OTHER ENDOCRINE GLANDS	11	7	4	11	0
SUBTOTAL	14	9	5	13	1
C77-LYMPH NODES					
LYMPH NODES	40	32	8	40	0
SUBTOTAL	40	32	8	40	0
C80-UKNOWN PRIMARY					
UNKNOWN PRIMARY	11	9	2	10	1
SUBTOTAL	11	9	2	10	1

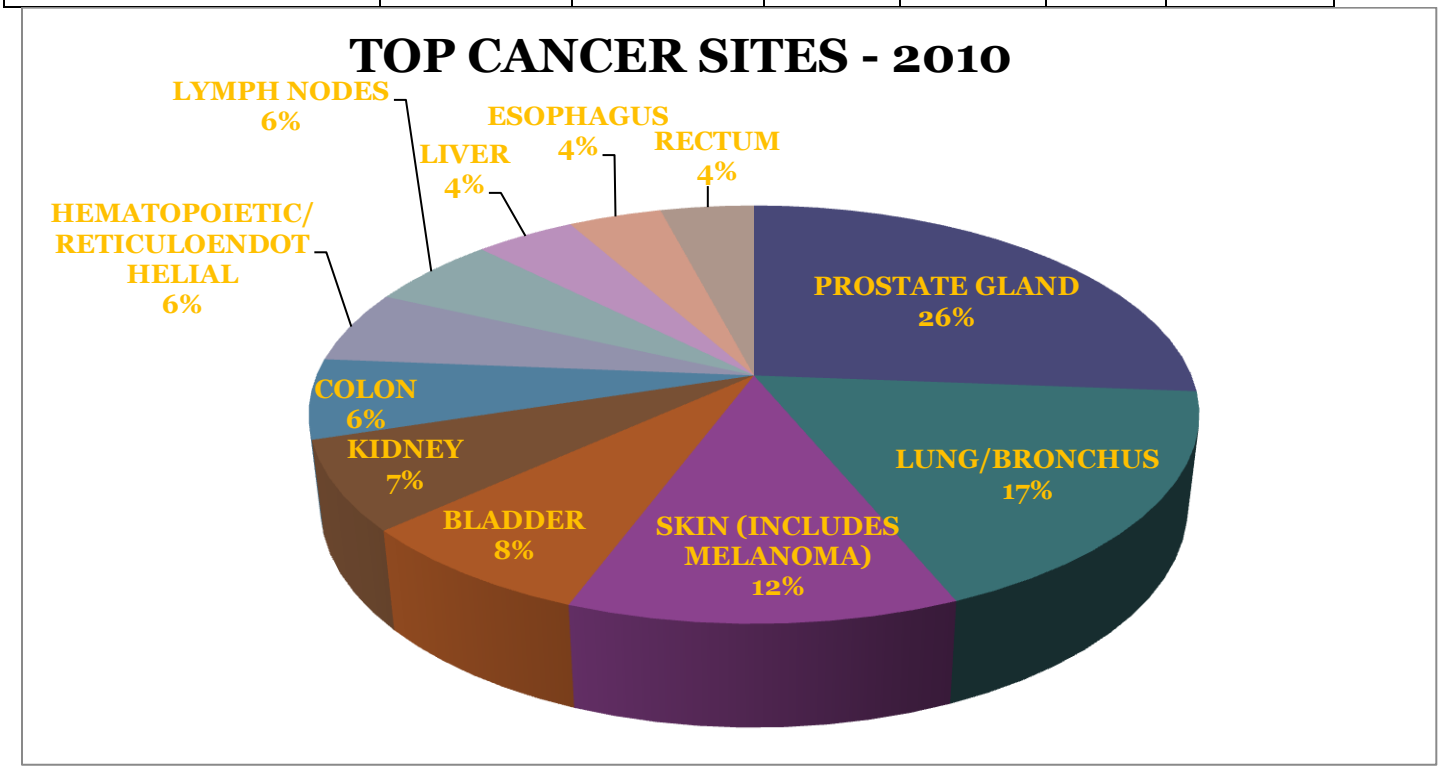
ALL CANCER TYPES (2010) – NUMBER OF CASES PER CANCER TYPE (ALPHABETICAL ORDER)

Site Group	Total Cases	Class		Sex	
		Analytic	Non-Analytic	Male	Female
ALL SITES	**896**	**716**	**180**	**870**	**26**
ANUS/ANAL CANAL	4	4	0	4	0
BILARY TRACT	4	4	0	4	0
BLADDER	54	40	14	54	0
BONE/JOINT/ARTICULAR	4	2	2	4	0
BRAIN	13	10	3	12	1
BREAST	9	8	1	3	6
CERVIX UTERI	6	3	3	0	6
COLON	44	37	7	41	3
CONNECTIVE/ SUBCUTANEOUS	4	3	1	4	0
ESOPHAGUS	29	26	3	29	0
EYE/ADNEXA	1	1	0	1	0
FLOOR OF MOUTH	7	5	2	7	0
GALLBLADDER	3	1	2	3	0
GUM	1	1	0	1	0
HEART/MEDIASTINUM/PLEU	1	1	0	1	0
HEMATOPOIETIC/ RETICULOENDOTHELIAL	40	33	7	40	0
KIDNEY	49	40	9	48	1
LARYNX	11	9	2	11	0
LIP	1	1	0	1	0
LIVER	31	28	3	31	0
LUNG/BRONCHUS	125	96	29	123	2
LYMPH NODES	40	32	8	40	0
MENINGES	7	7	0	7	
OTHER ENDOCRINE GLANDS	11	7	4	11	0
OVARY	1	1	0	0	1
PALATE	1	1	0	1	0
PANCREAS	18	14	4	18	
PAROTID GLAND	1	1	0	1	0
PENIS	3	3	0	3	0
PHARYNX	26	21	5	25	1
PROSTATE GLAND	187	142	45	187	0

RECTOSIGMOID JUNCTION	5	2	3	5	0
RECTUM	29	23	6	29	0
RENAL PELVIS	2	1	1	2	0
SKIN (INCLUDES MELANOMA)	85	77	8	84	1
SMALL INTESTINE	4	3	1	4	0
SPINAL CORD. CRANIAL NERVES	1	1	0	1	0
TESTIS	4	3	1	4	0
THYMUS	2	1	1	2	0
THYROID GLAND	3	2	1	2	1
TONGUE, BASE	4	2	2	4	0
TRACHEA	0	0	0	0	0
UNKNOWN PRIMARY	11	9	2	10	1
UTERUS, NOS	2	2	0	0	2

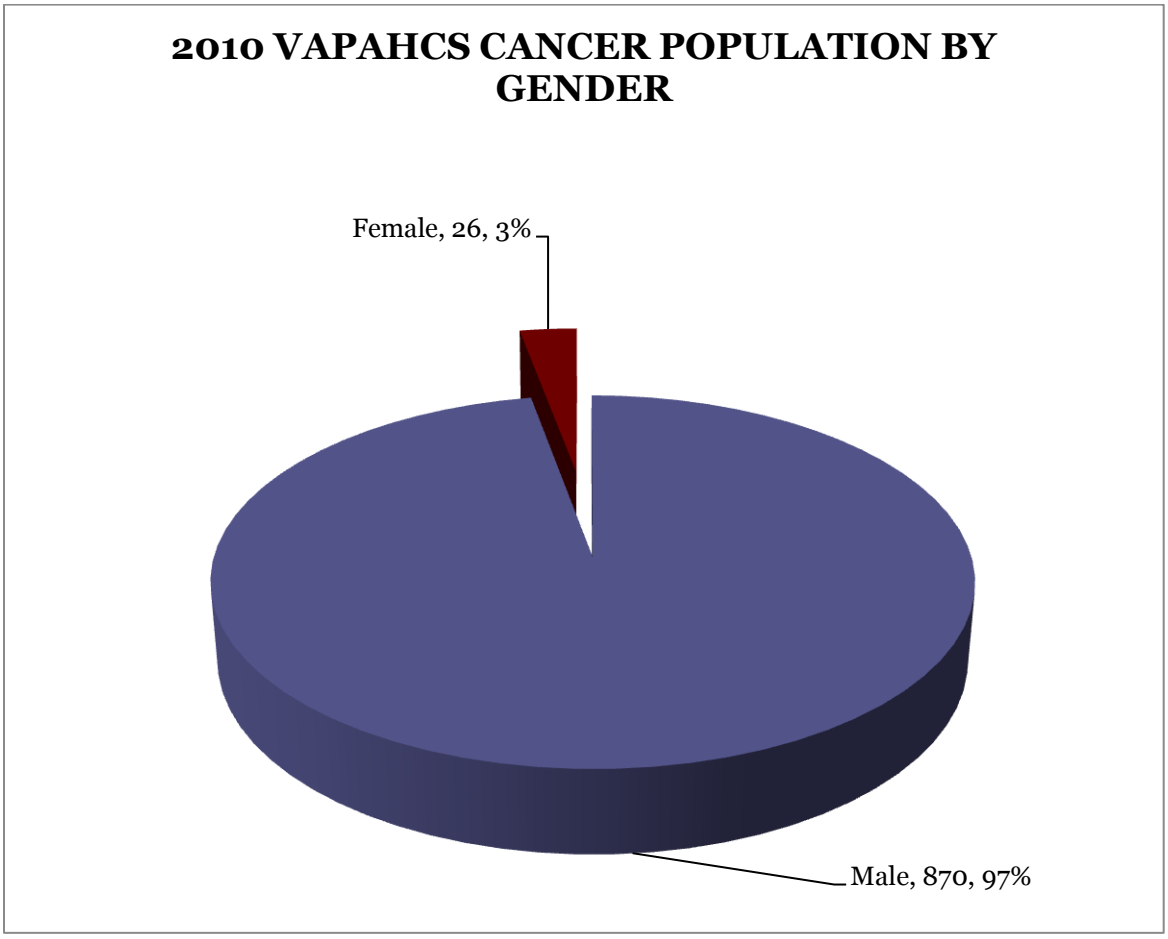
2010 VAPAHCS TOP CANCER SITES

Site Group	Number	Percent	Class		Sex	
TOTAL CASES	**896**	**100%**	**Analytic**	**Non-Analytic**	**Male**	**Female**
TOP CANCER SITES	**713**	**80%**	**574**	**139**	**706**	**7**
PROSTATE GLAND	187	21%	142	45	187	0
LUNG/BRONCHUS	125	14%	96	29	123	2
SKIN (INCLUDES MELANOMA)	85	9%	77	8	84	1
BLADDER	54	6%	40	14	54	0
KIDNEY	49	5%	40	9	48	1
COLON	44	5%	37	7	41	3
HEMATOPOIETIC/ RETICULOENDOTHELIAL	40	4%	33	7	40	0
LYMPH NODES	40	4%	32	8	40	0
LIVER	31	3%	28	3	31	0
ESOPHAGUS	29	3%	26	3	29	0
RECTUM	29	3%	23	6	29	0



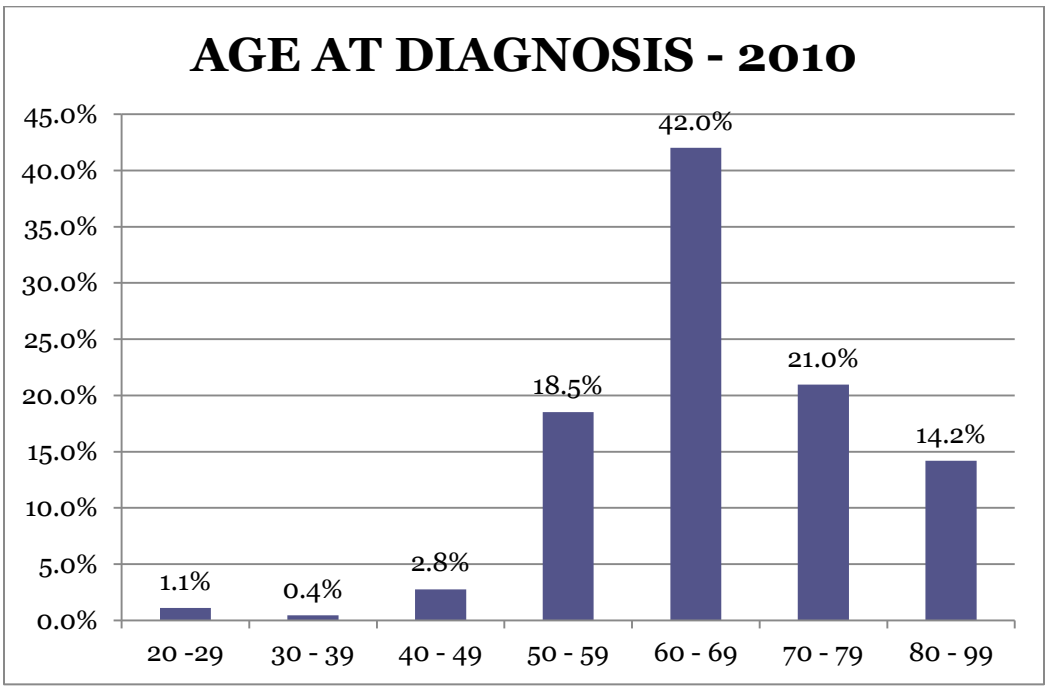
2010 VAPAHCS CANCER POPULATION BY GENDER

Site Group	Total Cases	Sex		Sex	
		Male	Female	Male	Female
ALL SITES	896	870	26	97%	3%



2010 VAPAHCS CANCER POPULATION – AGE AT DIAGNOSIS

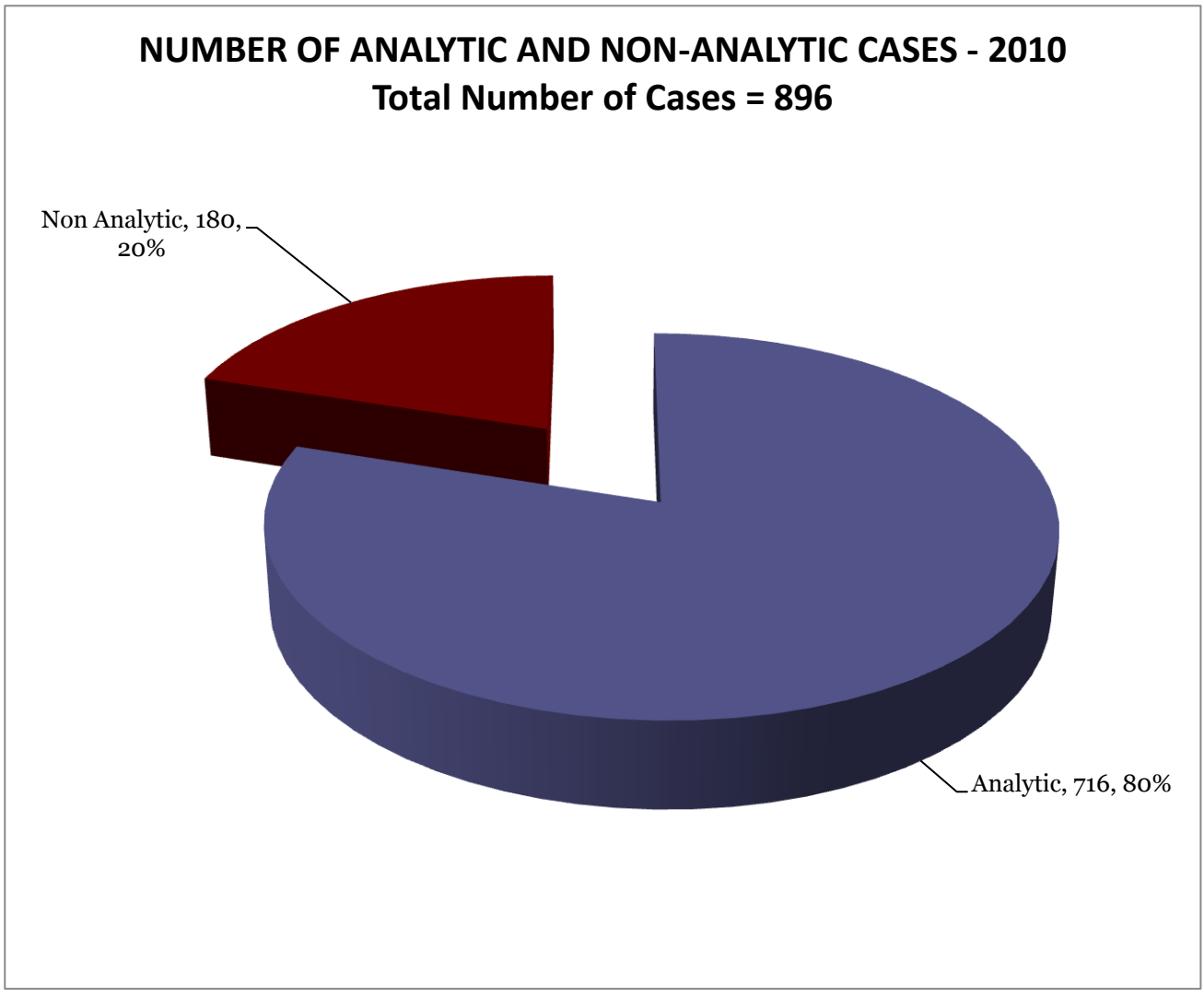
Age Range	%	Number
20 -29	1.1%	10
30 - 39	0.4%	4
40 - 49	2.8%	25
50 - 59	18.5%	167
60 - 69	42.0%	379
70 - 79	21.0%	189
80 - 99	14.2%	128



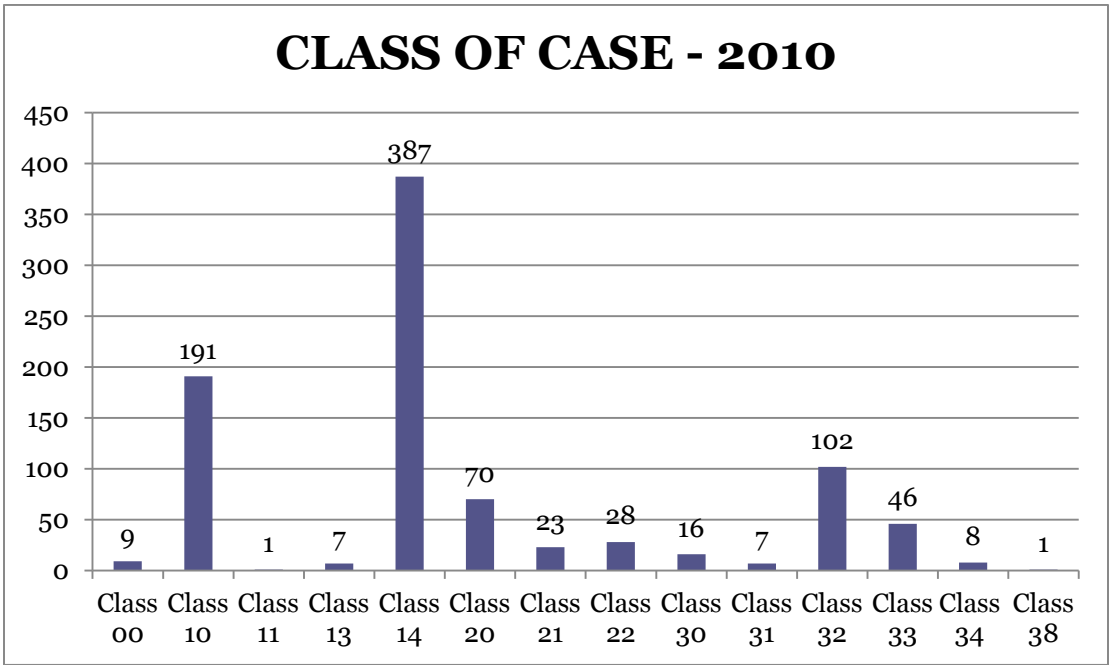
2010 VAPAHCS CANCER POPULATION – CLASS OF CASE

CLASS OF CASE - 2010		
TOTAL CASES	**896**	
ANALYTIC CASES		
Class 00: Initial diagnosis at the reporting facility AND all treatment or a decision not to treat was done elsewhere	9	
Class 10: Initial diagnosis at the reporting facility or in a staff physician's office AND part or all of first course treatment or a decision not to treat was at the reporting facility, NOS	191	
Class 11: Initial diagnosis in staff physician's office AND part of first course treatment was done at the reporting facility	1	
Class 13: Initial diagnosis at the reporting facility AND part of first course treatment was done at the reporting facility	7	
Class 14: Initial diagnosis at the reporting facility AND all first course treatment or a decision not to treat was done at the reporting facility	387	
Class 20: Initial diagnosis elsewhere AND all or part of first course treatment was done at the reporting facility, NOS	70	
Class 21: Initial diagnosis elsewhere AND part of first course treatment was done at the reporting facility	23	
Class 22: Initial diagnosis elsewhere AND all first course treatment or a decision not to treat was done at the reporting facility	28	
TOTAL ANALYTIC CASES		**716**
NON-ANALYTIC		
Class 30: Initial diagnosis and all first course treatment elsewhere AND reporting facility participated in diagnostic workup (for example, consult only, staging workup after initial diagnosis elsewhere)	16	
Class 31: Initial diagnosis and all first course treatment provided elsewhere AND reporting facility provided in-transit care	7	
Class 32: Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility with disease recurrence or persistence	102	

Class 33: Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility with disease history only	46	
Class 34: Type of case not required by CoC to be accessioned AND initial diagnosis AND part or all of first course treatment by reporting facility	8	
Class 38: Initial diagnosis established by autopsy at the reporting facility, cancer not suspected prior to death	1	
TOTAL NON-ANALYTIC CASES		**180**

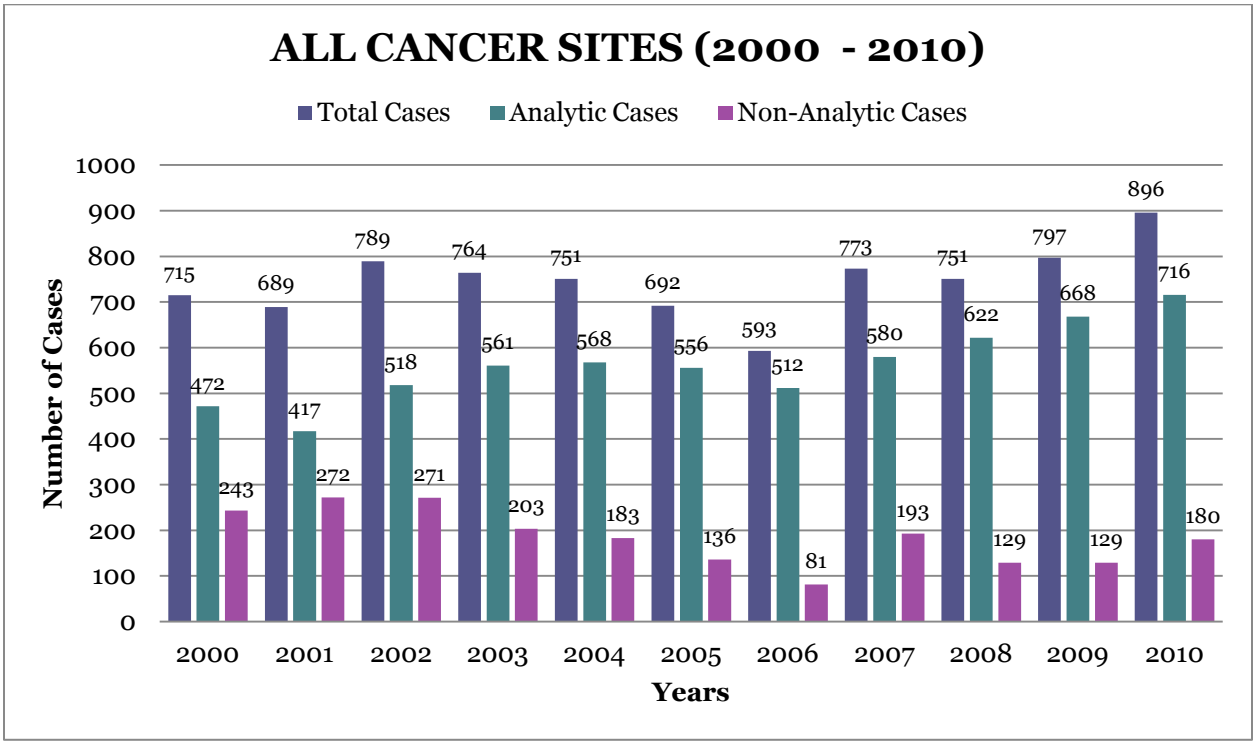


CLASS OF CASE - 2010		
TOTAL CASES	**896**	
Class 00	9	1.0%
Class 10	191	21.3%
Class 11	1	0.1%
Class 13	7	0.8%
Class 14	387	43.2%
Class 20	70	7.8%
Class 21	23	2.6%
Class 22	28	3.1%
Class 30	16	1.8%
Class 31	7	0.8%
Class 32	102	11.4%
Class 33	46	5.1%
Class 34	8	0.9%
Class 38	1	0.1%



2010 VAPAHCS ALL CANCER SITES

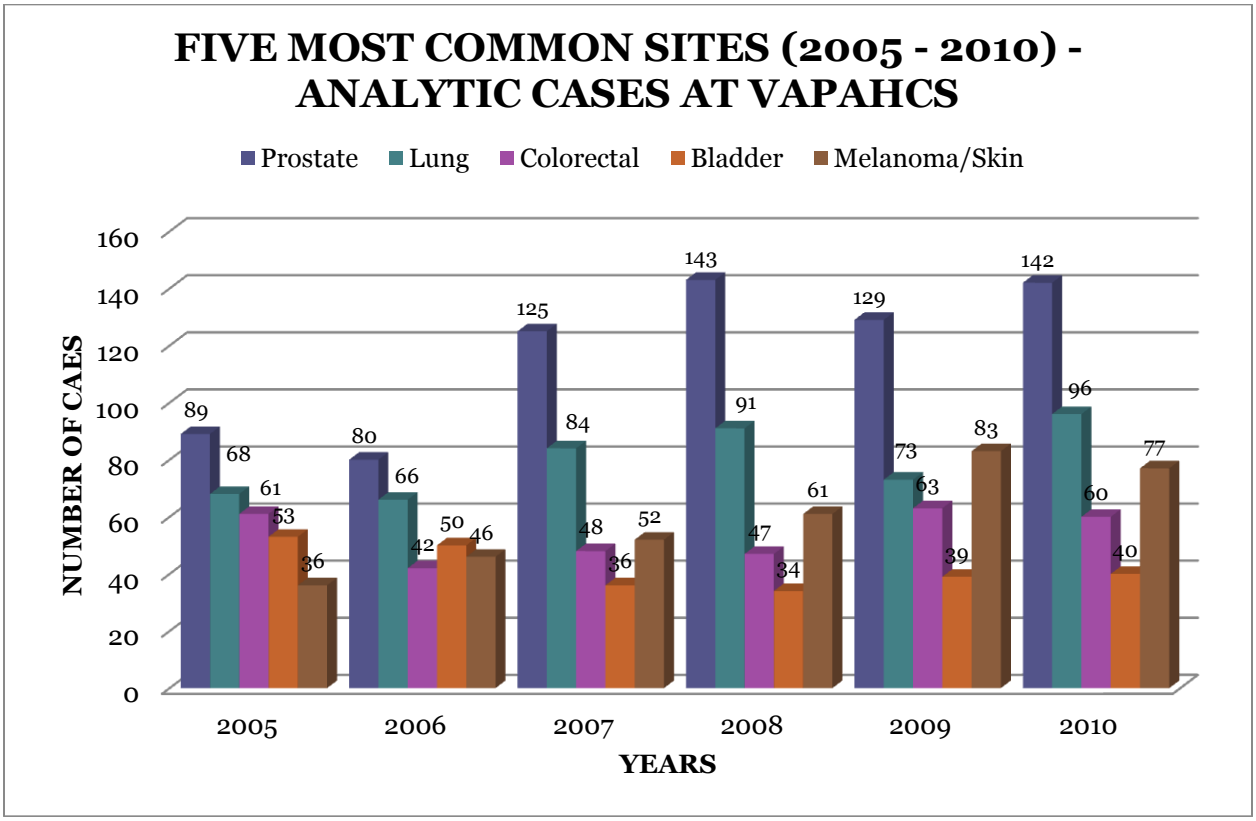
ALL CANCER SITES (2000 - 2010)											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Cases	715	689	789	764	751	692	593	773	751	797	896
Analytic Cases	472	417	518	561	568	556	512	580	622	668	716
Non-Analytic Cases	243	272	271	203	183	136	81	193	129	129	180



2010 VAPAHCS TOP FIVE CANCER SITES

FIVE MOST COMMON SITES – (2005 – 2010) - ANALYTIC CASES

	2005	2006	2007	2008	2009	2010
Prostate	89	80	125	143	129	142
Lung	68	66	84	91	73	96
Colorectal	61	42	48	47	63	60
Bladder	53	50	36	34	39	40
Melanoma/Skin	36	46	52	61	83	77

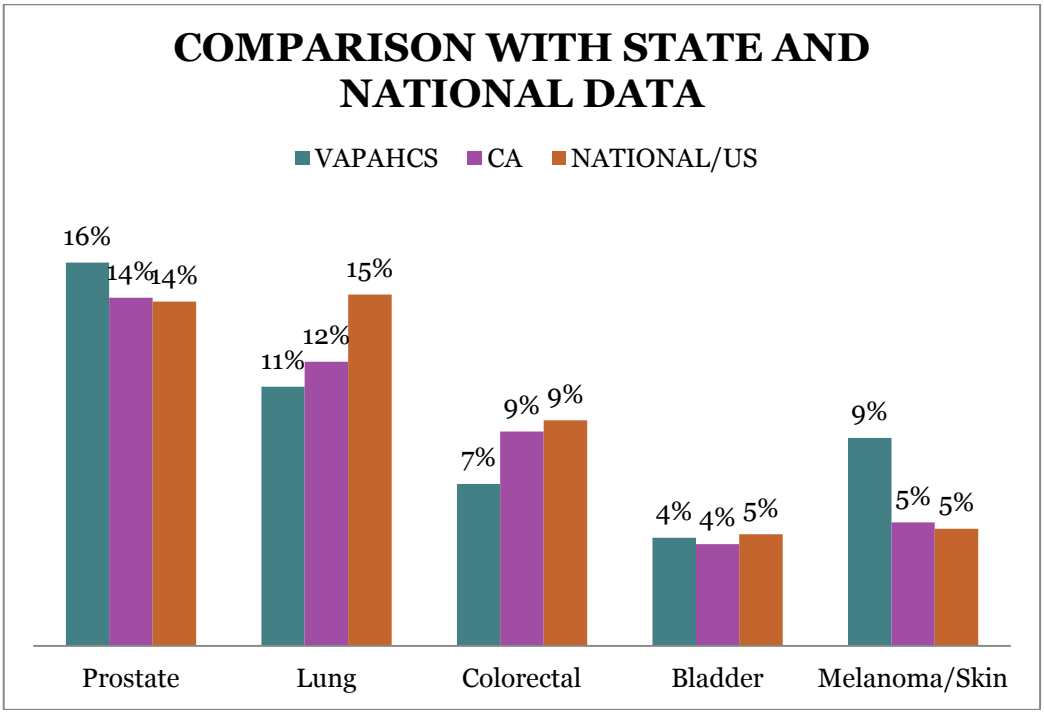


Comparing frequency data of five top cancer sites at VAPAHCS, Prostate and Lung cancers were consistently the highest (and increasing) over the 5 year period.

COMPARISON -2010 VAPAHCS FIVE MOST COMMON SITES WITH STATE AND NATIONAL DATA

*Source: American Cancer Society, Cancer Facts and Figures 2010

	VAPAHCS	CA	NATIONAL/US	VAPAHCS 2010 ALL NEW ACTUAL CASES	CALIFORNIA EXPECTED NEW CASES	NATIONAL US EXPECTED NEW CASES
Prostate	16%	14%	14%	142	22,640	217,730
Lung	11%	12%	15%	96	18,490	222,250
Colorectal	7%	9%	9%	60	13,950	142,570
Bladder	4%	4%	5%	40	6,620	70,530
Melanoma/Skin	9%	5%	5%	77	8,030	74,010



Comparing with National and State estimates, in 2010 VAPAHCS'S had higher new cases in Prostate cancer than state and national number. This is most likely due to the fact that the VAPAHCS patient population is 94% male. Melanoma/skin cancer is also slightly higher while Lung and Colorectal cancers were close to National and State estimates. Bladder cancer was the same as National and State numbers.

Maria Tham
Cancer Program

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CLINICAL PATIENT SERVICES

Behavioral Medicine/Psychology

Behavioral Medicine, a sub discipline of the Psychology service, provides a variety of clinical services to patients with malignant disease and their families. Services include initial assessment and ongoing follow-up in outpatient Oncology and Hematology clinics and the Ambulatory Infusion Center, bedside consults and follow-up in inpatient medicine/surgery wards and ICU, and appointments in outpatient Behavioral Medicine clinic. Empirically-supported interventions target emotional support, coping skills training to manage emotional distress, symptoms, procedure-related anxiety, and treatment side-effects, family issues, compliance, tobacco/alcohol/drug use, and issues uniquely related to death and dying. Behavioral Medicine also provides referral to appropriate social and mental health services within the Palo Alto VA, at other VA sites and within the communities in which veterans live. Behavioral Medicine collaborates closely with the treating medical team and other health care providers/services, such as the chaplain service, social work, and hospice.

In 2010, Behavioral Medicine is estimated to have had over 450-500 patient contacts through Oncology and Hematology. In addition, the Staff Psychologist provides her services for a support group for women, in conjunction with the Women's Health Clinic, diagnosed with any kind of cancer.

Veronica A. Reis, Ph.D.
Staff Psychologist, Behavioral Medicine

Dental Service Cancer Care

Cancer Prevention and Patient Education

As a part of all clinical dental exams, patients are screened for tobacco and alcohol use. Each patient seen is given a head and neck screening exam for detection of head and neck CA and other abnormalities. Biopsies are performed as indicated and if the biopsy is abnormal referrals are made to the appropriate surgical service. Patients who use tobacco products are counseled and are offered referral to the smoking cessation programs our Medical Center offers.

Clinical Care and Support of Medical Services

The Dental Service continues to be involved in the care of patients who have or have had head and neck Cancer. Once the diagnosis of head and neck cancer is obtained, the Dental Service provides dental care in support of the patient's cancer treatment here at the Medical center. This care includes pretreatment oral care to reduce the risk and severity of oral complications of cancer treatment, oral care during cancer treatment and necessary follow-up oral care once treatment of head and neck cancer is completed.

The Dental service takes an active role to assure that all patients scheduled to receive radiation therapy for head and neck cancer have a complete dental exam and necessary dental treatment prior to starting radiation therapy. The Dental Service receives frequent referrals from Oncology and ENT for supportive dental care, which allows for an excellent multidisciplinary approach to patient management and coordination of care.

The Dental Service also provides pretreatment oral care and necessary oral care during treatment to patients receiving chemotherapy or preparing for bone marrow transplantation. The focus of treatment for these patients is elimination of oral infection or potential infections of dental origin, which could complicate and prolong the course of their medical treatment.

Tabulation of activity

- In the year 2010 there were **42** patients in our database with a diagnosis of Head & Neck Cancer who needed to be considered for a dental referral.

- The dental service saw 28 Head & Neck Cancer patients in 2010 that are currently under active care or have completed dental evaluations and/or dental care.

- **11** patients had a diagnosis of head & neck CA and no consult was sent to the Dental Service. In each of these cases prior dental screening was not an issue because their radiation therapy was unlikely to involve the oral cavity (maxilla and mandible), these patients were edentulous with no dental issues, no radiation was planned or the patient was under the care of a private dentist or dental care at another VA facility.

- **3** patients had a Dental Consult sent and were not seen by the dental service during this reporting period. All patients were contacted by the dental service and offered an appointment. These three veterans were seen at the VA Dental Service located closer to their home because this was a more convenient location.

Lori R. Beeninga, DDS
Chief, Dental Service

- Data for this report was put together by Maria Tham from Cancer Program.

Dermatology Service

The Dermatology Service has a long-standing commitment to providing exemplary care for patients diagnosed with all types of skin cancer (basal cell carcinoma, squamous cell carcinoma, melanoma, and cutaneous lymphoma) and continues to advocate skin cancer prevention and early diagnosis. The VAPAHCS Mole and Cutaneous Melanoma clinic coordinates the care of melanoma patients with both Surgical and Medical Oncology Services. The Dermatology Service works closely with the Stanford Multidisciplinary Cutaneous Lymphoma Clinic and VAPAHCS medical oncologists to provide appropriate management for individuals diagnosed with cutaneous lymphoma. The Dermatology Service continues to focus on increased patient and professional awareness of skin cancer as well as early detection and prompt treatment for diagnosed cases.

Clinical research in the field of melanoma has resulted in multiple publications related to the epidemiology, prognostication, and disease outcomes for melanoma. We have submitted manuscripts related to our multi-center (VAPAHCS/Stanford/Michigan) survey study assessing behavioral determinants of successful early melanoma detection in both men and women, and data analysis is in progress.

Various studies are in progress related to our VAPAHCS/Stanford research study of existing medical records and archived tissue and slides of melanocytic and other skin tumors for histologic, molecular, and immunohistochemical markers relevant to the pathogenesis and prognosis of melanoma, including assessment of fluorescence in situ hybridization for improved diagnosis of controversial melanocytic neoplasms.

Dr. Susan Swetter continues her work as the national Dermatologist Liaison for the ECOG Melanoma Committee and Co-Director of the Melanoma Prevention Working Group, a unique Intergroup collaboration that has provided a national forum for interdisciplinary research among academic oncologists, surgeons, and epidemiologists dedicated to melanoma prevention. Dr. Swetter serves as the VAPAHCS Principal Investigator for the **VA CSP#562 Keratinocyte Carcinoma Chemoprevention Trial**, with target accrual of 100 patients nearly completed at VA Palo Alto, the 2nd highest accruing site of the 12 participating VA medical centers nationwide.

Susan M. Swetter, MD
Assistant Chief, Dermatology Service, VAPAHCS
Director, VAPAHCS Mole and Cutaneous Melanoma Clinic
Professor of Dermatology, Stanford University Medical Center/VAPAHCS

General Surgery-Oncology

The General Surgery-Oncology clinic receives referrals for patients at various stages of their cancer. Approximately 30% of the patients have just received the diagnosis of cancer and need planning and coordination of an extensive pre-operative and metastatic work-up. Much time is spent on patient and family education and support. The other 70% of the patients are seen in follow-up after the primary therapy has been completed. This treatment often is a combined modality approach consisting of chemotherapy, radiation therapy, and surgical resection. The majority of patients have a diagnosis of colorectal cancer, hepatocellular carcinoma, esophageal cancer, breast cancer, and malignant melanoma.

We work closely with Medical Oncology Service to provide a smooth transition to and from their primary auspices if the patient requires active chemotherapy treatment or placement on multi-center clinical trials. We again have an Oncologist full-time in our clinic, which greatly facilitates consultations between Medical and Surgical Oncology and often saves the patient from making two separate appointments. The clinic personnel include 5 General Surgeons, 2 General Surgery Clinical Nurse Specialists, an oncologist, and a rotating team of General Surgery residents, interns, and medical students. A social worker and chaplain are available for consultation.

The General Surgery Clinical Nurse Specialist maintains a database of approximately 150 active cancer patients. The information on the database includes primary procedure, pathologic stage, and recent developments. It is very helpful as a quick reference for what has occurred with patients long-term and provides data for research activities. We continue to monitor all CEA levels done at our facility in order to case-find patients with undiagnosed malignancies or recurrences.

Lynne Dempsey RN, MS, ACNS-BC
General Surgery Clinical Nurse Specialist

Genitourinary Oncology

Palo Alto is the primary referral clinic for veterans with genitourinary cancer from Fresno, Reno, Stockton, Modesto and Sonora. In 2010, approximately 250 cancer operations were performed at the VA facility. As one of a few VA centers with a robotic surgery program, Palo Alto also serves as a regional referral center for complex minimally-invasive and robotic-assisted surgery. The Urology Division of the Palo Alto VA aims to provide latest in specialized care for our cancer patients and strives to provide all patients with individualized and compassionate care.

The Urologic Oncology Clinic is a weekly clinic based at Palo Alto Division designed to care for Veterans with complex cancers. In order to ensure optimal care for each patient, this multidisciplinary clinic is staffed by two urologists, a medical oncologist, two nurse practitioners and residents. Every week, an average of 40 new and established cancer patients are seen in the GU Oncology clinic at the PA facility.

Urology in the Palo Alto VA Health Care System. Cancer patients are also seen at Livermore and Monterey and in other urology clinics at the Palo Alto facility. A system of referrals, consultations and exchange of patient information is in existence between all these facilities.

The Genitourinary Tumor Board is held on the third Tuesday of every month and coordinated by Ms. Carole Fong, the Cancer Program Coordinator. It is attended by radiologists, pathologists, medical oncologists and urologists, as well as medical students and residents. Radiation Oncologists also attend on an "as needed" basis. This conference is both a management and indications conference as well as a teaching function.

The Genitourinary Pathology Conference is held once a week for 3 weeks every month. The pathology of surgical specimens and biopsies generated the previous week are reviewed and discussed with a faculty member from the Department of Pathology and a treatment plan is formulated.

The Genitourinary Radiology Conference is held weekly. Imaging studies from Urology patients and consults are reviewed with the panel of urologists and radiologists to assist in creating a streamlined treatment plan.

Prostate Cancer Support Group is held on the third Tuesday of every month from 11:00 AM to 12:30 PM. Patients with newly diagnosed prostate cancer are mailed information and an invitation to join. It is primarily a patient-run gathering with occasional input from the urologists and medical oncologists.

John Leppert, M.D.
Assistant Professor of Urology; Director of Urologic Oncology

Hematology Service*

The Hematology Service provides comprehensive care for patients with hematologic malignancies, including myeloma, acute and chronic leukemia. Individuals with clonal myeloproliferative and lymphoproliferative disorders, and with myelodysplastic syndromes are also followed and rendered cared by this service.

Clinical Activity

Patients with the above disorders are seen in the Hematology Clinic, Palo Alto Division. The clinical staff is composed of three VA-based attending hematologists as well as three Stanford-based hematologists (in rotation), a hematology clinical nurse specialist, and two hematology fellows. Hematology Clinics convene at the Monterey and Livermore Divisions weekly, each staffed by an attending hematologist. Due to the geographic limitations, patients with relatively stable hematologic malignancies are seen in the Hematology Clinic at Livermore or Monterey; those patients requiring more complex management are followed at the Palo Alto Division.

The Ambulatory Infusion Center provides excellent care to those hematology patients requiring transfusion support, chemotherapy, bisphosphonate infusions, IVIG, or hydration. Vascular access care and therapeutic phlebotomies are also performed by the nursing staff in the AIC. Patients staying on the rehab/CLC unit will receive their infusional treatment in the AIC. Patients may receive therapeutic phlebotomies, hydration or transfusion support at the Livermore Division on a limited basis.

Patients requiring admission to the hospital are often admitted to the Medicine Service, but are closely followed by the Hematology fellow and attending physician on service, and also by the Hematology clinical nurse specialist as warranted. Frequently, these patients are admitted to the rehab/community living center (CLC) unit, particularly in those situations where the patient lives too far to receive infusional therapy on an out-patient basis. This is particularly advantageous for those patients whose condition may require closer monitoring than is possible in the ambulatory care setting, yet does not warrant an admission to Acute Medicine.

Many of these patients are seriously ill and need frequent follow-up and management. The Hematology Fellow and Clinical Nurse Specialist frequently see patients in the Ambulatory Care setting in the Hematology Same Day Clinic. Patients are seen as urgently and frequently as their condition warrants, reducing the need for hospitalization in many instances.

Multi-Disciplinary Approaches to Patient Care:
The Hematology Service strives to provide individualized attention to patients and families, which primarily results from continuity of care. Attending physicians see the same patients over time so that a therapeutic relationship can develop; a second-year fellow (with six-month rotations) is afforded the same opportunity. Many patients are routinely seen by the Hematology Clinical Nurse Specialist and psychology staff from Behavioral Medicine. Other services are employed as appropriate, including, Social Work, Home Care, Hospice/Palliative Care, Pain Management, and Radiation Oncology. The Hematology CNS is the contact person for patients and families as questions arise/problems develop while the patient is at home.

One of the Hematology Attendings is also chair of the institution's Transfusion Program.

Education Activities
Patients with unusual hematological malignancies, or who have problems that exemplify useful learning opportunities for internists and oncologists, are presented as appropriate at the VA Tumor Board. Fellows and an attending Hematologist typically present these cases.

Nursing in-services are provided as need arises or per staff request regarding specific disease states, transfusions, chemotherapy administration, experimental treatment protocols, and vascular access management. A journal club is active within the Ambulatory Infusion Center and typically addresses issues related to infusional therapy (e.g., hypersensitivity reactions to chemotherapy), psychosocial patient issues, new drugs, or review of disease states.

A weekly journal club is convened prior to the weekly Hematology Clinic; one of the Hematology Fellows leads the discussion of an article of interest to that Fellow. Fellows and attendings also participate in hematology educational venues at Stanford.

The Hematology Fellows, CNS, and two Hematology Attendings all attended the annual meeting of the American Society of Hematology. The Hematology Clinical Nurse Specialist attended the annual meeting of the Oncology Nursing Society and is involved in the Nursing Committee and the Symptom Management and Outcomes Committee of the Eastern Cooperative Oncology Group and as such, attends these semi-annual meetings.

Mary Thomas, RN, MS, AOCN
Hematology Clinical Nurse Specialist

*update for 2010 is currently pending

Hospice Care Center and Palliative Care Services

The Hospice and Palliative Care Center provides patient-centric care, palliative and end of life care for both veteran and non-veteran patients. Disciplines represented on the team include medicine, nursing, social work, chaplaincy, psychology, occupational therapy, massage therapy, and recreational therapy.

Currently, we have sharing agreements with five community hospices. During the 2010 calendar year, 236 patients (4 non-veterans) were admitted to the unit. Referrals come from all areas in the acute hospital, including the ICU, IICU, med/surg units and ER, as well as VA Menlo Park Division, Livermore division, community hospices, local hospitals, private community physicians and oncology clinics. Most patients admitted to our unit die on the unit, and the majority of patients live less than one month – average length of stay is 21 days.

Families receive bereavement support for a period of one year after the death, which include an initial letter with a grief booklet, periodic phone calls, bi-monthly bereavement support groups, semi-annual memorial ceremonies, a holiday grief support group, a year anniversary card and referral to community resources if needed. This year, the program started sending out monthly mailings to bereaved family members on coping with grief and loss. Ongoing work is being done to improve outreach within the VA system and in the community (e.g. partnering with those who participate in the "We Honor Veterans" program).

Leadership

Dr. James Hallenbeck, Medical Director of the Hospice and Palliative Care Program, continues to carry out dual roles as both Director of the Hospice & Palliative Care Center and Associate Chief of Staff for Extended Care. In addition to these two roles, Dr. Hallenbeck actively pursues research and remains a dynamic leader in organizations directed at improving end-of-life care locally and nation-wide.

VJ Periyakoil, MD is the Associate Medical Director of Palliative Care Services and the Director of the Palliative Medicine Clinic. The Palliative Medicine Clinic continues to meet once a week for half a day. In addition to managing patients' pain and symptoms, this clinic makes referrals to both inpatient and home hospices. This past year there were 157 encounters in the Palliative Medicine Clinic. Dr. Periyakoil is also the director of the Stanford University/VAPAHCS Palliative Care Inter-professional Fellowship Program. Her research areas include effects of psycho-social distress (PTSD, grief and depression) on the illness trajectories and service utilization of patients with serious life limiting illnesses, and inter-professional education in palliative care and geriatrics. Dr. Periyakoil uses her e-Learning expertise to promote education and training for older adults and all patients with serious illnesses living in rural and highly rural areas through the THRIVE-Online initiative.

Ms. Sheila Kennedy is the program's social worker and serves as the main point of contact for referrals to our inpatient unit for veterans, whether enrolled into our system or not, from community hospice agencies or hospitals. She is critical in facilitating admission to our unit and has been utilized by community case managers at local hospitals to help with transitioning to hospice care for those patients who are appropriate.

Clinical Activities

In 2010, the Palliative Care Consult Team completed approximately 446 consults. This number has significantly increased from the number of consults completed last year, in part due to the establishment of a dedicated consult team for our community living centers in Menlo Park and Livermore. Facilitation of decision making remains a frequent request, along with requests for aid in symptom management and requests for hospice (both inpatient and home hospice). Patients are seen in acute medicine, ICU, ER, outpatient clinics and in the community living centers (nursing homes). Inpatient referrals for home hospice are made by the public health nurse while referrals for outpatients are made by the nurses of the Home and Community Based Care program.

The Hospice & Palliative Care Center continues to receive the support of very talented and devoted volunteers who are trained and scheduled by our Volunteer Liaison Ms. Penny Phillips. At present time we have 24 active volunteers who come to the unit on a regular basis and provide emotional support and companionship for our patients and do various tasks to support the staff. In addition, we have "Furry Friends" who visit our Hospice Care Center every other week and bring dog and cat visitors. Monthly, we have a "Threshold Choir" (a women's *a* cappella group) who sing on the unit as well as enter patient rooms to sing at bedside when invited. Every Wednesday, we have "Soup for the Soul" and homemade organic soup with homemade bread is made by volunteers and shared with patients and families. We have orientation for new volunteers three times a year and monthly support groups for the volunteers when they share their experiences and sometimes hear guest speakers.

Education

Education is a high priority for the program. As mentioned in last year's report, in 2010 the VAPAHCS continues to be the hubsite for the VA Inter-professional Palliative Care Fellowship Program which trains fellows in medicine, social work, psychology and chaplaincy. Additionally, VAPAHCS in affiliation with Stanford University houses the Stanford University Hospice and Palliative Medicine Fellowship Program, one of 73 programs accredited by the Accreditation Council for Graduate Medical Education (ACGME).

The VAPAHCS Palliative Care Service is one of the primary training venues for trainees at all levels including medical students, interns, residents and fellows from a variety of disciplines and sub specialties. The Hospice and Palliative Medicine fellows and trainees rotate to Palliative Medicine Clinic, respond to inpatient consults, and work with both VA nursing homes and

community hospices in addition to their work with patients on the inpatient unit. This broadened experience provides a more comprehensive understanding of hospice and palliative care and facilitates communication and cooperation with programs beyond the Hospice & Palliative Care Center.

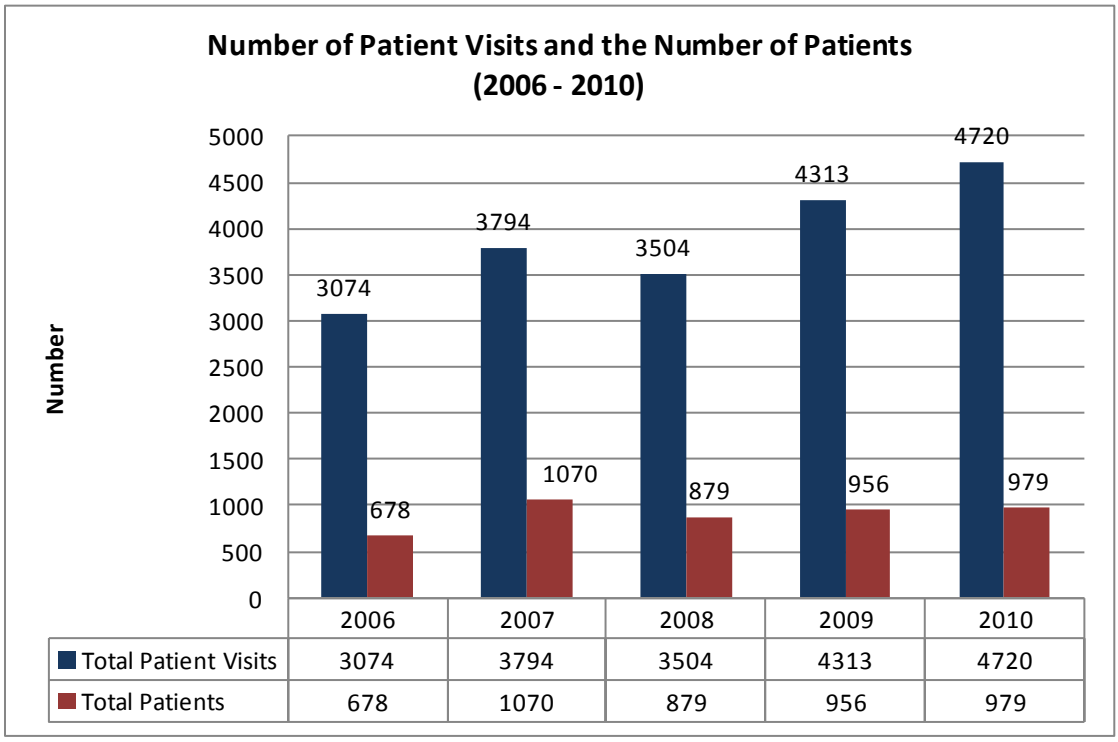
Though our program continues to grow and develop, one of its greatest strengths remains the staff who is able to connect with the patient and family and to deliver personalized Veteran-centric care that makes each patient feel unique and special. These ideals are at the heart of the program and we are fortunate to have a team that is dedicated to them.

Michelle Gabriel, RN
Palliative Care Clinical Nurse Specialist

Medical Oncology –Outpatient

The Medical Oncology clinic is supported by oncologists, pharmacists, medical social worker, psychologist, chaplain, nurse case manager, and research nurse. Other members readily available by consult include the Pain Service clinical nurse specialist, dietitian, public health nurse, Hematology/Oncology clinical nurse specialist, and the hospice/ palliative care team.

Medical Oncology sees outpatients in clinic twice a week, with three attending oncologists, and 3 to 4 oncology fellows seeing approximately 60-80 patients each week. The clinic is also assisted by 2 voluntary attending faculties. There were 979 patients and 4720 patient visits in 2010.



	2006	2007	2008	2009	2010
Total Patient Visits	3074	3794	3504	4313	4720
Total Patients	678	1070	879	956	979

* Source: PCE Encounter Summary Report by Year, Oncology Stop code 316, VA Vista Database

The Oncology Ambulatory Care Program is supported by the Ambulatory Infusion Center (AIC). The AIC is open 5 days a week to provide chemotherapy, hydration, antibiotic and blood component therapy, patient education and support for procedures such as bone marrow biopsies. Six RNs are certified to administer chemotherapy. They change PICC line dressings, flush central lines and assess intravenous site. Most infusions are done during clinic days.

Peter Di Donato, PA
Medical Oncology Outpatient

Medical Oncology – Inpatient Care

Unit 2A (Medical-Oncology-Telemetry), a 31 bed unit in the Specialties and Hospital-Based Services (acute inpatient), is a medical oncology functional equivalent unit, with ten rooms (9 private rooms with one double room) designated for oncology/hematology Veteran patients. Oncology/hematology Veterans receive inpatient chemotherapy/biotherapy treatments, as well as supportive treatments on Unit 2A. The Intermediate ICU (IICU) also provides chemotherapy/biotherapy treatments for those Veterans who are not stable enough to be transferred to Unit 2A to receive treatment. Both 2A & IICU also administer chemotherapy/biotherapy for non-oncology indications.

In 2010, the total number of acute inpatient care chemotherapy/biotherapy treatments administered for both oncology and non-oncology indication was 67. The table below summarizes the inpatient chemotherapy/biotherapy treatments for the year 2010.

Treatment Indication	Number of Treatments (Unit 2A)	Treatment Regimen	Number of Treatments (IICU)	Treatment Regimen
Non-Hodgkin's lymphoma (follicular, diffused large B cell, Burkitt's,	27	Rituximab + Bendamustine; Rituximab + Cladribine; RICE; R + Hyper CVAD; modified Hyper CVAD; DA – EPOCH; R + CHOP; Etoposide + Doxorubicin + Vincristine; ICE;	3 1 MSICU	Rituxan + etoposide + Cyclophosphamide + mesna; Rituximab; CHOP; Rituximab + Gemcitabine + Oxaliplatin (2A Chemo RN administered the treatment in MSICU)
Small cell ca - liver	1	Carboplatin		
Post-heart transplant			1	Rituximab
Sarcoma (chondrosarcoma	5	Cisplatin + Doxorubicin;		
Myelodysplastic syndrome	1	Prednisone; Bortezomib; Velcade + Dexamethasone		

Rectal cancer	1	XELOX		
Multiple myeloma	2			
Lung cancer (Non-small cell)	2	Paclitaxel + Carboplatin		
Ovarian	2	Carboplatin;		
Head & neck (tonsillar, oral squamous cell,)	1	Cetuximab + Taxol + Carboplatin; Paclitaxel + Carboplatin;		
Testicular	3	Etoposide + Cisplatin		
Pancreatic	1	Gemcitabine		
Glomerulonephritis	1	Cyclophosphamide		
Esophageal (Squamous)	1	Carboplatin + 5-Fluorouracil		
Adrenocortical	2	Gemcitabiine (day 1)+ Capecitabine; Gemcitabine (day 8)		
Leukemia (CLL, AML)	3	Bendamustine; Rituximab; Decitabine;		
Esophageal (Adenocarcinoma)	4	Folfox 4		
Ca of unknown origin (Squamous cell)	2	Paclitaxel + Carboplatin		

Oncology Nursing

RN Nurse Managers provide the day-to-day direction to the staff of Unit 2A & IICU. Oncology nursing care of oncology/hematology Veterans in the inpatient acute-care setting are provided by Chemotherapy-Trained RNs (CTRNs), most especially when it comes to treatment administration. These RNs have completed an initial training that consists of the Oncology Nursing Society (ONS) Chemotherapy and Biotherapy Course, the Oncology Nursing Competency-Based Orientation, and Oncology Nursing Practicum. This is followed by the Annual Chemotherapy Training (ACT). In addition, the CTRNs are required to renew the ONS Chemotherapy Provider Card every two years. On the year that the CTRN is renewing his/her Provider Card, the CTRN does not have to attend the ACT, and vice versa.

	2010	2009
Number of Chemotherapy -Trained RNs (2A/AIC/IICU)	26 2A = 15 AIC = 6 IICU = 5	28 2A = 18 AIC = 6 IICU = 4
Number of Oncology-Certified RNs	8 (3 Advanced and 5 Generalist)	8 (3 Advanced and 5 Generalist)
% of certification	32%	28%

Other allied staffs, such as Nursing Assistants and Environmental & Management Service are also trained in some oncology-related topics, such as neutropenia and safe handling of hazardous drugs involving chemotherapy. In-services are also available to other licensed staff consisting of non-oncology nurses caring for oncology patients, and oncology nurses administering treatments for non-oncology indications. Class on Cancer Basics is provided to new staffs in the Nursing Education New Grad Program and Nursing Orientation.

There are three clinical experts in oncology nursing: one oncology-certified clinical nurse specialist (AOCNS) and two advanced-practice oncology nurses (AOCN), hematology and pain management. They serve as consultative resources.

The AOCNS directs the oncology nursing training program. In addition, the AOCNS has been working collaboratively with the Oncology CNS at another VA facility to set up an oncology certification course to prepare oncology RNs to take the national certification for oncology nursing.

Ms. Connie Yabes-Sabolboro, RN, MS, AOCNS® has been working on setting up a cancer survivorship program at the VA Palo Alto Health Care System (VAPAHCS), a nurse-led program that addresses long-term care needs of oncology Veterans who had completed their cancer treatment. An informational kick-off related to the program was incorporated at the VAPAHCS Cancer Survivorship Day in September 2010. The program has been presented at the 2010 Association of VA Hematology/Oncology Conference in Little Rock, Arkansas and in the 2011 VHA Cancer Care Collaborative Learning Session 3 in Orlando, Florida.

Ms. Yabes-Sabolboro, RN, MS, AOCNS® is also involved in the Veterans Health Administration (VHA) Office of Nursing Service Clinical Practice Program as a member of the Oncology Faculty Advisory Committee. Through this Committee, she and eight VHA RNs from various States are collaborating with ONS on a project to develop a handbook on national VHA oncology nursing competency and training standards.

Connie Yabes-Sabolboro, RN, MS, AOCNS®
Medical Oncology – Inpatient

Nuclear Medicine

The Nuclear Medicine Service uses radioactive tracers with single photon emission-computed tomography (SPECT) and positron emission-computed tomography/computerized tomography (PET/CT) for evaluation of patients with known or suspected malignancy. Imaging is used for diagnosis, staging, treatment evaluation, and surveillance.

Major equipment includes a PET/64-slice CT camera (Discovery STE, General Electric), and three dual-head SPECT (single photon emission computed tomography) cameras (Infinia, General Electric). The SPECT cameras are also capable of low-resolution CT imaging for improved diagnostic accuracy. There is a cyclotron and radiochemistry facility on-site to produce radioactive tracers.

The Nuclear Medicine Service performs PET/CT scans for veteran patients throughout VISN 21. Over 1,500 exams are performed annually. Most patients are referred for evaluation of known or suspected malignancy. The most common cancer diagnoses are: lung, colon and rectum, esophagus, melanoma, lymphoma, and breast.

Other diagnostic examinations include bone scans, octreotide scans (neuroendocrine tumors), radioiodine scans (thyroid cancer) and radionuclide ventriculography (assessment of left ventricular function in patients receiving cardiotoxic agents).

Digital images are available for viewing by health care providers throughout the health care system using a picture archive and communication system (PACS), which also creates a permanent repository for all imaging studies.

The Nuclear Medicine Service also uses unsealed radioactive materials for cancer therapy. Therapeutic procedures include high-dose radioiodine treatment for thyroid cancer metastases, and samarium treatment for palliation of painful skeletal metastases.

The Nuclear Medicine Service collaborates with other clinical departments to support cancer research projects.

The Nuclear Medicine Service offers post-graduate training for physicians wanting to learn PET/CT, with a special emphasis on applications in oncology. Training is conducted throughout the year, and is arranged on an individual basis.

The Nuclear Medicine Service trains residents in Nuclear Medicine and Diagnostic Radiology as part of a joint training program with Stanford University. One resident rotates through the department each month.

George Segall, MD
Chief, Nuclear Medicine Service

Otolaryngology (ENT) Service

The Otolaryngology (ENT) service offers comprehensive management of tumors of the head and neck region, which includes detection, surgical treatment of benign and malignant tumors, and post-treatment surveillance. The ENT service works closely with Radiology, Pathology, Oncology, Radiation Therapy, Dental, Audiology/Speech Pathology, Restoration/Reconstruction clinic and many other services as needed. If necessary, facial reconstruction surgery is also available and is offered to patients by the ENT service. Some examples of tumors seen by the ENT service include pharynx (throat), larynx (voicebox), sinus, nose and nasopharynx, mouth and tongue, salivary glands such as the parotid, and endocrine glands such as the thyroid and parathyroid.

A multidisciplinary Head and Neck Cancer Conference meets every Thursday at Stanford to bring together the expertise of surgeons, radiotherapists, and medical oncologists to recommend optimal treatment plans.

Ella Benadam-Lenrow, RN,
ENT Clinic Nurse Coordinator

Pain Management

The pain management clinic at the VAPAHCS meets twice weekly. Clinic staff consists of Anesthesia Pain Medicine, Behavioral Medicine, Physical Medicine and Rehabilitation and Nursing disciplines. This year the service staff added one physician from Polytrauma/Physical Medicine and Rehabilitation. From the calendar year 2009 to the calendar year 2010 new-patient visits increased from 411 to 439; follow-up visits increased from 841 to 960; and pain procedure appointments decreased from 603 to 599. Computerized consult requests and 24-hour paging provide access to the pain service for both inpatient and outpatient cancer patients. Consults for cancer pain management remain the priority and patients with cancer pain are overbooked into the clinic as need be. Hospitalized patients are typically seen the day the consult is received. Interventional procedures (e.g. nerve blocks, long-term intraspinal infusions) are available via the pain service. Peri-operative epidural management and regional nerve blocks are available via the newly formed regional anesthesiology service; finally vertebroplasty is available via interventional radiology. Interactions with oncology, hospice, and palliative care take place on an as-needed basis. Patient care conferences with the interdisciplinary team are scheduled as needed. Consistent communication concerning suggested interventions to the referring clinician is routine. Coordination of care between services is the norm. Just-in-time education is done on pain management issues as needed (e.g., management of continuous intrathecal infusions on hospice).

Janette Elliott, RN, MSN, AOCN
Pain Management Clinical Nurse Specialist

Pathology and Laboratory Service

All tissue and cytology specimens for the VAPAHCS are processed and interpreted the Palo Alto Division. The entire report of pathological findings is available in the DHCP patient database for easy access by physicians and other health care providers. For all surgical pathology cases resulting in a diagnosis of cancer, an e-mail "critical pathologic value alert" is sent to the attending physician. New cancer diagnoses are communicated verbally to a member of the health care team. The electronic "critical cancer alerts" provide attending physicians with the pathological TNM staging for complete cancer resections. Pathologic TNM staging is also provided for all cancers newly diagnosed at autopsy. In 2010, we processed 9758 surgical pathology specimens, of which 893 were diagnosed as containing cancer.

Starting January 1, 2004, the pathology reports on all required cancer resection and biopsy specimens have followed the published CAP protocols. We have formalized this now by creating a template for presentation of the required information. This protocol data is included in our standard pathology report.

All cancer cases are confirmed by a second staff pathologist. A critical alert is sent to the submitting physician for all cases with a diagnosis of cancer. New cancer diagnoses are communicated verbally to a member of the health care team.

Before transfer to the hospital computer system, the pathology reports are generated in a database constructed in FileMaker Pro. The reports are retained in archival FileMaker Pro databases where they are available for free text searches. Such searches do not depend on coding of diagnoses, which is subject to errors. This searching ability is a valuable tool for patient care, record analysis and research.

Our database now contains over 110,000 surgical pathology reports dating from 5/91 to the present. All can be accessed for free text searches. Over the last few years we have performed searches for a number of services for cancer-related studies.

We have regular weekly meetings with the following services to review positive biopsies and excisions: General Surgery, Gastroenterology, Urology, and Dermatology (twice a week). In addition all autopsies are reviewed at a weekly conference with the Radiology Department and any interested clinicians.

Kristin Jensen, MD
Assistant Service Chief, Anatomic Pathology, for

Robert V Rouse, MD
Service Chief, Pathology and Laboratory Service

Pulmonary Medicine (Thoracic Oncology)

Physicians and Staff in the Pulmonary / Critical Care and Sleep Medicine sections provide comprehensive care in the diagnosis and staging of lung cancer. Diagnostic services include flexible fiberoptic bronchoscopy, transbronchial needle aspiration biopsy under fluoroscopy guidance, diagnostic thoracentesis, closed pleural biopsies, pulmonary function testing and cardio-pulmonary exercise testing. We also perform advanced state-of-the art interventional pulmonary procedures like Electromagnetic Navigational (EMN) guidance bronchoscopy and Endobronchial Ultrasound (EBUS) guided biopsies. EMN allows sampling of peripheral lung nodules that are not within reach via a conventional bronchoscope. EBUS guidance is utilized for fine-needle aspiration biopsies of select mediastinal and hilar lymph nodes and lung masses.

The Lung Nodule Team (comprised of Pulmonary Attending, Pulmonary and Critical Care Fellow, and an RNP or RN) meets two-three times a week to review all the Lung Nodule and Out-patient referrals. After performing a detailed review of their medical record and pertinent radiographic imaging studies, we provide recommendations for management of the patient. For patients with lung nodule(s) 8 mm and above and those with high clinical suspicion for lung malignancy, we coordinate all medical care by ordering and following-up on imaging studies, expediting scheduling of imaging studies, arranging for biopsy procedures and facilitating consult visits with other specialties. We also coordinate accommodation and travel-related issues for our veterans travelling long distances. All this is done with the veteran kept constantly informed of the entire process. Our active Lung Nodule Team evaluates and follows a large cohort of patients with pulmonary nodules. We also evaluate all other lung nodules that are less than 8 mm in size and provide appropriate recommendations to the primary care providers. Historically, about 20% of Lung Nodule referrals have been diagnosed with lung cancer. In 2010, we received a total of one hundred and seventy two specific Pulmonary Lung Nodule consults. We received many other outpatient and inpatient pulmonary consults for lung lesions. We also provided inpatient consultation services to lung cancer patients who presented with pulmonary symptoms.

In 2010, the Pulmonary and Critical Care service performed 102 diagnostic and therapeutic Bronchoscopy procedures. 89 of these procedures were conventional cases and there were an additional 13 complex interventional cases. 49 of these procedures were performed in the Bronchoscopy Suite and 40 were performed in the critical care setting (ICU, IICU and ER). 18 cases were diagnosed with lung cancer and were referred to Thoracic surgery and/or Oncology services for treatment and further management.

Pulmonary faculty, fellows, and staff participate in a monthly multidisciplinary Thoracic Cancer Conference and Lung Nodule Forum that is attended by Oncology, Thoracic Surgery, Radiology, Nuclear Medicine, Pathology and Radiation Oncology. We are actively involved in the Cancer Collaborative Program which monitors, plans, organizes and implements comprehensive cancer

care tools and services to better improve our ongoing management of cancer patients at the VA Palo Alto Health Care System.

In 2010, 125 patients with lung cancer were diagnosed and/or treated at VAPAHCS. Most patients were between the ages of 60-79, 98% were male. 90.4% of patients were diagnosed with non-small cell lung cancer and 9.6% were diagnosed with small-cell lung cancer. Among those patients diagnosed with non-small cell lung cancer, adenocarcinoma and squamous cell carcinoma were the two most common histologic subtypes.

Ware Kuschner, MD
Division of Pulmonary/ Critical Care Medicine

Harman S. Paintal, MD
Division of Pulmonary/ Critical Care Medicine

Luis San Gabriel, BSN, RN
Division of Pulmonary/ Critical Care Medicine

Radiation Therapy Facilities at Stanford Cancer Center

The Department of Radiation Oncology moved into the Stanford Clinical Cancer Center on March 1, 2004. The Radiation Oncology Clinic, where new and follow-up patients are seen, is located in "Module D" on the first floor. Radiation Therapy procedures and treatments are performed in a 50,000 square foot space on the ground floor.

The Radiation Oncology Department offers extensive medical expertise for the evaluation, planning and administration of radiation treatments for Veterans referred here. Stanford Radiation Oncology faculty are board certified or eligible seasoned experts, all recognized internationally for their specific subspecialties and contributions to the treatment of Hodgkin's disease, non-Hodgkin's lymphoma, prostate, lung, breast, brain, head and neck, mycosis fungoidis, gynecological and pediatric cancers. Our faculty members attend the VA Palo Alto Health Care System's monthly general tumor boards, weekly pulmonary and GU tumor boards and quarterly Cancer Care and Health Physics committees. They are also available for telephone consultation regarding management for patients who have not been seen by us along with providing on-call consultation twenty-four hours a day, seven days a week.

Our radiation therapists are certified by both National and State agencies. Our physicists, as well as the dosimetrists, are board eligible and/or certified. Other staff includes registered nurses, social workers and support staff. Each patient is managed by a medical team consist of a member of the faculty, a resident, therapists, a dosimetrist and a registered nurse. Digital treatment field images are reviewed by the faculty and residents each day. In addition, patients who started a new course of radiation treatments are presented at chart rounds on Wednesdays to ensure optimum quality of patient care.

On September 16, 2010, Stanford Clinical Cancer Center became the first treatment center on the West Coast and the fifth in the world to offer cancer patients the TrueBeam system, a medical linear accelerator that represents an exponential leap forward in the speed, power and precision of radiation therapy. The TrueBeam linear accelerator is capable of delivering radiation at a faster dose rate than most conventional linear accelerators. This advance translates into shorter treatment times for patients. The new machine's radiation delivery precision is controlled to within less than a millimeter, as its advanced imaging checks accuracy every 10 milliseconds, continually monitoring more than 100,000 data points. TrueBeam's 4D imaging system captures views in 60 percent less time than in previous machines and reduces overall X-ray exposure for that imaging by one-quarter. The increased speed means less blurring in each image, which helps to more clearly define the edges of a tumor.

The TrueBeam system is especially good for tumors deep in the body because it adjusts for movements in tumors, which are nudged in various directions with each breath. In a technique called respiratory gating, the TrueBeam's sends out radiation only when the tumor is within the

beam's line of delivery. The platform couch which holds the patient also adjusts with the same sub-millimeter accuracy. In combination with the TrueBeam's rapid, multi-dimensional imaging, the effect is a much higher degree of protection for healthy tissue adjacent to the cancer.

In addition to Truebeam, our state of the art treatment equipment includes five medical linear accelerators with identical photon and electron energies. Each linear accelerator has a 120-leaf multi-leaf collimator, two sets of independent jaws and dynamic wedge capabilities along with an electronic portal imager capable of acquiring real time images as treatments are being delivered. Our treatment field verifications are digital instead of film. Trilogy and LA 12 have an imaged-guided radiation therapy system optimized for both conventional and stereotactic approaches to treat cancer. It has "Stereoscopic X-Ray Guidance" capability, which allows radiation oncologists to be able to more accurately ensure that target volume is treated to the planned dose of radiation. Images are acquired in the treatment room and based on this corrections are made, if required, to bring the target volume to the desired location prior to starting that day's treatment. The stereoscopic images have to be fused and registered with the pretreatment digitally reconstructed radiographs and the required shifts calculated using customized software.

Superficial x-ray treatments are provided on the Oldelft Therapix unit.

Two "Cyberknife" systems- robotic arm mounted linear accelerators are available for frameless stereotactic radiotherapy treatments, both for cranial and extracranial tumor sites. One Cyberknife unit is in the Blake Wilbur building and the 2nd Cyberknife unit is located in our department in the Cancer Center.

There are 4 dedicated simulators available for simulations. The "PET-CT" and the "AcQsim" CT simulators provide CT geometric accuracy for tumor localization to meet three-dimensional conformal and high precision radiotherapy planning requirements. PET simulation on the "PET-CT" scanner has been available since January 2005. The digital "Acuity" and the "Ximatron" simulators are available for conventional simulations, iso-center, block and field verifications. In addition, the Acuity simulator is installed in a shielded vault to facilitate High Dose Rate (HDR) remote brachytherapy treatments without having to move the patient between simulation and treatment.

Plans are underway to replace the AcQsim CT simulator with a Siemens PET-CT scanner, tentatively scheduled to go live in May, 2012.

The radiation oncology department utilizes ARIA, a comprehensive information, treatment record and verification and image management system that aggregates patient data into a single, organized, oncology-specific electronic medical chart. We are scheduled to migrate to ARIA V10, the latest software version in October, 2010.

Radiation therapy treatment modalities:

- Volumetric modulated arc therapy – RapidArc
- Conformal arc
- Frame based stereotactic radiotherapy
- Frameless stereotactic radiotherapy
- Total Body Irradiation
- Total skin electron therapy
- Intraoperative radiation therapy (IORT)
- High dose rate (HDR) brachytherapy treatment in a dedicated shielded vault
- Low dose rate (LDR) brachytherapy treatment
- Intensity modulated radiotherapy (IMRT)
- Imaged Guided radiation therapy (IGRT)
- Prostate permanent seed implant
- Respiratory gated radiation therapy
- Radioimmunotherapy

Volumetric modulated arc therapy- RapidArc is a volumetric arc therapy that delivers a precisely sculpted 3D dose distribution with a single 360-degree rotation of the linear accelerator gantry. It is made possible by a treatment planning algorithm that simultaneously changes three parameters during treatment: rotation speed of the gantry; shape of the treatment aperture using the movement of multi-leaf collimator leaves and delivery dose rate.

Volumetric modulated arc therapy differs from existing techniques like helical IMRT or intensity-modulated arc therapy (IMAT) because it delivers dose to the whole volume, rather than slice by slice. And the treatment planning algorithm ensures the treatment precision, helping to spare normal healthy tissue.

Cranial stereotactic radiotherapy, which is carried out in collaboration with faculty from the Department of Neurosurgery, is a technique for treating arteriovenous malformations (AVMs) of the brain, other benign growths, as well as metastatic deposits in the brain. Although it is a one-day outpatient procedure, nearly a full day is required for the entire treatment to be completed. Occasionally, up to three fractionated treatments are delivered within a 24-hour period, requiring the patient to be admitted to Stanford.

Frameless stereotactic radiotherapy treatments for the cranium, spine and the head and neck are administered primarily on the "Cyberknife System".

Stereotactic treatments for lung, prostate, liver, pancreas and other body sites are administered primarily on Truebeam and Trilogy.

Intraoperative radiotherapy (IORT) is available in two of the operating rooms at Stanford. In order for VA patients to receive this therapy, they must be admitted to Stanford.

High dose rate brachytherapy (HDR) treatment provides intense, highly localized doses of radiation quickly and without radiation exposure to hospital staff. This is a one half-day procedure and can be done on an out-patient basis. It is used in treatment of a variety of sites including endobronchial metastases, esophageal, rectal, prostate, uterine and cervical cancers.

Low dose rate brachytherapy (LDR) treatment uses low dose rate radiation isotopes to treat malignancies or benign conditions, by means of radioactive sources placed close to or into the tumor or treatment site. This is a 2-3 days in-patient procedure. It is used in the treatment of a variety of sites including head and neck, breast, uterine and cervical cancers.

Intensity modulated radiotherapy (IMRT) is able to modulate the intensity of a number of beams while the multileaf collimator (MLC) leaves move at constant velocity to their appropriate positions to achieve a conformal dose to the tumor while sparing more normal tissues. This enables dose escalation with the potential for improved local tumor control and less complications.

Prostate permanent seed implant for early stage prostate cancer, in a single outpatient procedure, provides survival and cancer control equivalent to radical prostatectomy. Comparable treatment with external beam radiotherapy would require 7 weeks of daily treatment.

Radioimmunotherapy program with ongoing clinical protocols is available for the treatment of a variety of cancers with radiolabeled monoclonal antibodies.

Patients also have access to voluntary participation in numerous national (ECOG, RTOG, GOG, POG) and in house clinical trials subject to appropriate protocol review at the PAVAH.

3D Computerized Radiation Therapy Treatment Planning System:
The Eclipse treatment planning system utilizes CT, MRI and PET imaging information by direct input, and correctly accounts for patient anatomy and inhomogeneities in three dimensions for radiation dose planning. Respiratory gated 4D scans can also be downloaded into this system for radiation dose planning of tumor sites that may move during respiration in order to reduce the amount of radiation to normal tissues and structures. The Eclipse treatment planning system is also capable to plan for Volumetric modulated arc therapy.

Physics Quality Assurance Program:
The Radiation Oncology physics division provides a comprehensive quality assurance program for both patient treatments and medical equipment. Medical linear accelerators are fully calibrated annually for mechanical accuracy and radiation output by, or under direct supervision of, a board-certified physicist. High dose rate brachytherapy sources are calibrated upon arrival and checked monthly. Low dose rate source calibration policies vary according to type. Ir-192 sources are checked by measuring of 10% of incoming sources. Low dose rate but long half-life Cs-137 sources are checked against a specially-calibrated standard source and occasional review by a third party. Low-energy Iodine-125 seeds are supplied in a sterile format, having been checked and certified by the provider assays to verify manufacturer's calibration. Instruments used for measuring machine output are calibrated periodically by comparison with instruments calibrated by recognized standards laboratories. Instruments to measure brachytherapy sources are calibrated by an accredited laboratory for the specific source design to be used.

Measurement instruments are maintained by physics staff. Accelerator safety systems, mechanical systems performance and imagers are checked monthly for quality by a physicist. Radiation output for each beam energy is calibrated monthly by a physicist and re-checked daily by radiation therapy staff. Also checked on a daily basis by radiation therapy staff supervised by a designated physicist are the symmetry and uniformity of treatment fields for each beam energy. Staff is trained to notify the supervising physicist of any deviation beyond pre-set values that are entered by the physicist in a computer-based monitoring system that captures the daily measurements into a database. In response to a physician's written statement of treatment intent, dosimetrists or staff physicists generate manual or computer-based patient treatment plans that are approved by the attending physician, then independently calculated by a staff physicist as a check of calculational accuracy prior to first treatment. Computer planning systems and revisions thereof are commissioned by physics staff prior to clinical use. The treatment record of each patient undergoing multi-fraction treatment is checked weekly by a physicist for compliance with the documented physician-approved treatment plan.

All brachytherapy treatment plans are independently checked and signed off by a physicist. After every temporary placement of sealed-source radionuclides, the patient and room are surveyed following removal of the sources to verify that none was inadvertently left behind. Patients with permanent implants are surveyed with a radiation detector to verify compliance with all applicable regulations and policies prior to release. All sealed sources used for temporary placement are tracked and logged in and out of storage.

Diana Ho, Director, Radiation Oncology Services
Department of Radiation Oncology
Stanford Clinical Cancer Center

Radiology Service

The Radiology Service at VAPAHCS provides a full range of diagnostic and therapeutic imaging-guided examinations and procedures for patients with suspected or known malignancies. For many patients, top-flight imaging studies are essential for diagnosis, staging, treatment planning, and surveillance of their disease processes. Similarly, thoughtfully planned and carefully executed interventions often play key roles in the management of individuals who are battling cancer.

Radiologists at VAPAHCS are a key part of the cancer care team, providing essential expertise in all subspecialty areas of radiology. Not only are patients served at the main campus in Palo Alto, they are also served in our numerous satellite venues (CBOCs or community-based outpatient clinics). State-of-the-art care is provided in CT (computed tomography), MRI, (magnetic resonance imaging), ultrasound, vascular imaging, interventional radiology, and general radiography, and all of these modalities are combined to deliver optimal support for each cancer patient.

Many patients are referred to the Radiology Service for evaluation of clinical signs and symptoms that may reflect malignancy, and many others are referred for further evaluation of known malignancies. The most common types of cancer referred for imaging evaluation at our institution include those related to the lung, colon and rectum, liver, esophagus, lymph nodes, kidneys, skin (especially melanoma), and breast.

In the VAPAHCS community, Radiology images are acquired using modern digital equipment with attendant benefits in terms of efficient throughput, reduction of radiation exposure and enhanced diagnostic quality. Our digital images are rapidly made available for clinicians to review throughout the institution utilizing an electronic “picture archiving and communication” (PACS) system, iSite. This system facilitates prompt viewing, transmission, comparison and storage of our patients’ imaging data. Additionally, it facilitates the presentation and discussion of patients’ imaging examinations during the many interdisciplinary tumor boards and clinical conferences in which Radiology Service participates. The rapid production of written reports is made possible with PowerScribe, our digital voice recognition dictation system that works hand-in-hand with iSite.

To supplement our existing 1.5 Tesla MRI scanner, a new 3.0 Tesla MRI scanner has recently been installed. In addition, we recently installed our second, new 64-slice, dual-energy CT scanner. These devices provide advanced capabilities for multi-phase imaging and high-resolution diagnosis, and provide us with the ability to perform new types of examinations that are not possible with older, less sophisticated devices.

Interventional radiologists provide invasive diagnostic and therapeutic procedures for cancer patients. Their services range from biopsies to placement of long-term venous access devices, diagnostic high-resolution digital subtraction angiography, stent placement to treat obstructed organs, chemoembolization, transjugular intrahepatic portosystemic shunt procedures (TIPSS), and radiofrequency ablations, among other procedures. Important acquisitions for interventional radiology include a biplane angiography suite and a CT/Angiography unit. The biplane suite provides angiography capability in two imaging planes at once, superb diagnostic pictures, and advanced image analysis. The CT/Angiography suite, only the third in the United States, combines the capabilities of two modalities into one multifunctional suite that produces exquisite image detail and analysis.

Radiology has several active research programs underway to address many aspects of cancer diagnosis and cancer treatment. Ongoing work relates to abdominal imaging, thoracic imaging, neurological imaging, imaging of the head and neck, and musculoskeletal issues, to name a few. We are pleased to have strong collaborative relationships with many clinical colleagues in these endeavors.

In addition to these essential clinical and investigative roles, Radiology plays an integral role in the education of VA colleagues and Stanford University medical students, residents and fellows, all people learning to care for patients with cancer. Teaching activities are conducted throughout each day, in venues including reading sessions for clinical examinations, clinical consultations, multiple tumor board conferences, and interdisciplinary clinical conferences. We are happy to share with others the imaging expertise that is essential for modern physicians to treat patients with cancer.

We in Radiology eagerly play key roles in the care of cancer patients, research into ways to treat and prevent cancer, and education of individuals learning to treat patients with cancer. We are honored to serve in these ways and to support our Veterans who have cancer.

Eric Olcott, MD
Chief, Radiology Service

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Patient and Family Support

Audiology/Speech Pathology Service

Audiology/Speech Pathology Service (ASPS) is integrally involved in detection and management of patients with a variety of cancers and/or non-malignant tumors.

Audiologists are responsible for the diagnosis and management of hearing disorders and routine evaluations resulted in referrals of over 10-12 patients who were ultimately diagnosed with acoustic neuromas or malignant tumors of the ear or brain where impact on hearing was one of the first sequalae.

Speech Pathologists are responsible for the diagnosis and management of speech, language and swallowing disorders. Annually, approximately 1,800 patients were screened for speech-language and swallowing problems. These screenings and resultant videofluroscopic, fiberoptic evaluation of swallowing studies (FEES) and oral-motor evaluations resulted in referral of 20-25 patients who were evaluated for previously undetected oral, pharyngeal or laryngeal cancer. Speech Pathologists also provided over 5,000 treatments for approximately 100 patients with problems resulting from surgical or radiation intervention for cancer of the face, mouth, tongue, larynx, pharynx, esophagus or brain. These included speech or swallowing problems resulting from glossectomy, mandibulectomy, or laryngectomy, and cognitive or language problems resulting from brain cancer. Approximately 15 patients were continually followed for management of tracheo-esophageal prosthetic devices and speaking valves.

To assure maximum safety of patients of patients with inflatable tracheotomy cuffs and speaking valves, Speech Pathology partnered with Respiratory Therapy and provided training to all Intensive Care Unit staff on the proper procedures for placement of speaking valves. In addition, Speech Pathology has partnered with ENT surgeons in establishing protocols which result in earlier placement of humidifying and speaking devices for laryngectomy patients and has continued treatment protocols to prevent fibrosis in patients undergoing radiation therapy which can result in swallowing difficulties. This includes oral-pharyngeal exercises and issuance of devices (e.g. Therabite) to support vascularization of tissue and prevention of trismus.

Staff actively participated in team management specifically in the area of nutritional assessment and management and makes every effort to provide convenient follow-up to these patients by staffing clinics at Palo Alto, Menlo Park, Livermore, San Jose, Monterey, and Stockton.

Every effort is made to assure highest quality of service to cancer patients and the service has supported over 200 hours of training for staff in the last two years in the areas of identification

and management of laryngeal cancers, ear pathologies, etc., and, as noted above, has provided in-services to other hospital personnel in various areas aimed at improving management, particularly of swallowing, for cancer patients.

Arlene Kasprisin, Ph.D.
Chief, Audiology/Speech Pathology Service

Cancer Prevention Performance Measures

EOY cancer performance scores for FY10:

Breast Cancer Screen	81%- denominator of 213	Benchmark-77%
Cervical Cancer screen	92%- denominator of 347	Benchmark-86%
Colorectal Cancer screen	77%- denominator of 1097	Benchmark-67%

Tobacco use screen is 99% in patients seen in outpatient clinics. We have done exceptionally well with counseling nearly all tobacco users that were in the sample of records that were audited. The sampling is random, based on patients having a clinic appointment within 12 months in GMC, Pulmonary, Cardiac, Endocrine, Women's Health, and other medical or mental health clinics where primary care management occurs. There has not been a change in the sampling methodology for several years.

The Women Health Program (WH) continues to be proactive in educating and reminding patients to have mammograms and PAP smears. Patients that do not have screening either refuse or are a "no show" for those appointments. The Women's Screening Program has continued to implement continuous quality improvement activities.
Quality improvement activities include:

- Simplification of the mammogram ordering process
- Continued collaboration with the business office
- Close collaboration with mammography vendor sites
- Site visits by Linda Kleinsasser, WVPM, to mammography vendors to improve scheduling process
- Meeting with Stanford Mammography on process improvement
- Patient reminders for overdue mammograms
- CBOC liaisons-Linda met with CBOC liaisons for the process improvement
- Regular visits to CBOCs by WHC staff to provide women's health issues education
- Provider encouragement to close clinical reminders on cervical cancer and breast cancer screening

Colorectal cancer screening is done either by 3 FOBT annually, colonoscopy every 10 years or a sigmoidoscopy every 5 years. Most of the patients screened have had a colonoscopy. Palo Alto HCS has one of the highest colorectal cancer screenings in the nation.

Catherine Schiavone, RN, BSN
Quality Management

Cancer Support Group

Our Prostate Cancer Support Group has been a great resource for our patients since 1999. We are very proud of our achievements with this group and we have done a lot since we first started. As part of our goal to seek ways to better benefit the group and continuously improve, we decided to open this group to other Cancer survivors. As of July 2006, the former Prostate Support Group has changed to Cancer Support Group.

By broadening our scope to other Cancer groups, we will be able to learn from other people's experiences with the different kinds of cancers instead of just Prostate. After all, no type of cancer is better than another. All forms of cancer can be debilitating and we would like everyone to be able to share their experiences and support each other no matter what cancer they have fought/are fighting. We welcome suggestions and comments. Please feel free to let us know if there is anything else we can work together as a team to make this support group better meets the cancer patients' needs.

The Cancer Support Group meeting in the Library Conference Room located in Palo Alto Division, Building 101, Room A2-120 from 11:30 am to 1:00 PM every month on the third Tuesday of the month. All veterans and publics with their spouses and families are welcome to the meeting. Light refreshment contributed by the volunteers is served at each meeting, The staff at Cancer Program provides the administrative assistance. Each month a speaker from the facility or the community is invited to the meeting to provide interesting and relevant medical and educational presentation to the group.

The following were the presentations/Discussions/Activities for the Cancer Support Group during 2010

MONTH	EVENT
January	Open Forum: Round Table Discussion on Prevention of Prostate Cancer
February	Open Forum: Round Table Discussion for Prostate Cancer
March	Video Presentation: Coping With Cancer; Tools to Help You Live
April	Video Presentation: Take Time to support for people with cancer
May	Open Forum: Round Table Discussion on Advance prostate cancer
June	Open Forum: Round Table Discussion on Living With Prostate cancer

July	Video Presentation: Managing Cancer-Related Fatigue
August	Open Forum" Round Table Discussion on Sex and Relationships
September	Guest Speaker & Dietitian Evelyn Shinoda: Diet & Nutrition
October	Guest Speaker Dr Harlan Pinto Chief of Oncology, Prostate Cancer & Treatment
November	Open Forum: Round Table Discussion On What Are The Risks Radiation Therapy?
December	Open Form Round Table Discussion on When is radiation therapy used to Treat prostate cancer?

Lonnie Howard
Cancer Support Group Coordinator

Chaplain Service

As part of the Oncology Care Team, the Chaplain is a resource who provides for the spiritual cares/concerns of all. Dr. Virginia Jackson, Full-time Staff Chaplain serves, supports and ministers to Oncology patients in Oncology and Surgical Oncology Clinics, the Ambulatory Infusion Center and throughout the hospital on a consulting basis and as needed. Our service provides spiritual care for all faith traditions as well as those who do not profess faith in any religion.

Services provided by the Chaplain to the Oncology Care Team are:

- Chaplain support is available for Oncology/Surgery and Hospice team meetings and Tumor Board Conferences
- Twenty-four hour coverage is available for inpatients by Chaplain Service
- Telephone contact with patients and family members when appropriate (i.e. by referral)
- Ethical decision-making consultations as needed
- Charting patient visitations as a part of the interdisciplinary team functions
- Consultations with staff, patients and families in the Ambulatory Infusion Center
- Pastoral care and counseling visits that provide sensitized compassion, spiritual support, a caring presence and encouragement through prayer, laying-on-of-hands, and ministry of the Sacraments when appropriate.
- Available for walk-in pastoral counseling in the office

There is an ever increasing awareness and attention being given to the benefits derived from combining medicine with spiritual care for patients. VA Chaplains provide spiritual care and counseling for patients and families who request it. We offer a calm, safe and non-judgmental, non-anxious presence, especially regarding end-of-life issues, bereavement and grief counseling. We officiate at funerals and memorial services, on and off-site. It is an awesome privilege to be able to bring quality care and comfort to the veterans who suffer with cancer and their families by being present to meet their spiritual needs. We are grateful for the opportunity to serve our nation's veterans, who have borne the burden of our freedom.

The Reverend Dr. Virginia Jackson, D. Min., M.Div., BCC
Full-time VA Staff Chaplain

Community Health Services

The Community Health Nurse Coordinators are an integral component of the interdisciplinary team and provide a service that contributes significantly to the continuity of care of the veteran patient population. The CHNCs coordinate with the patient care coordinators and providers for timely inpatient discharges and support of outpatient services by rapidly accessing an array of quality home care and home hospice services over a wide geographic area. This coordination facilitates the collaboration of the community agency providers with VA providers to manage patient's symptoms in the home setting and seek early intervention to prevent lengthy hospitalizations, decrease emergency room visits, and improve quality of life.

The home health/hospice care provided varies with the individual needs of the patient from post surgical interventions, pain management, symptom management, medication management, home safety evaluations, home IV therapy, to comprehensive home hospice care. Community-based home health/hospice referrals are made only to agencies that are currently state licensed, JCAHO accredited and/or Medicare certified while home IV referrals are made only to JCAHO accredited agencies. Some of the home infusion agencies are also contracted as Medicare D (pharmacy) providers. The payment sources can be varied but primarily are Medicare and VA Purchased Care.

The CHNCs provide for home health and hospice services that contribute significantly to the quality of care to patients with cancer in the home setting.

Amy Syjuco BSN, RN
Surgical PCC/PHN

Nutrition And Food Service

Eating well during cancer therapy will help recovery and improve outcomes. Unfortunately, the treatments used to fight cancer and even the cancer itself can make eating very difficult.

A dietitian can address nutritional concerns early to help patients and caregivers prepare for eating challenges. Nutritional screening and assessment allows for identification of cancer patients who are malnourished or who are at risk for becoming malnourished. Inpatient dietitians and diet technicians individualize a patient's diet with their special needs in mind. A dietitian is available to outpatients and their caregivers upon request.

Educational resources, including videos and cookbooks, are available in the patient waiting areas, the libraries and upon request, to help patients and families cope with common eating problems such as: loss of appetite, nausea, vomiting, diarrhea, taste changes, chewing and swallowing problems, dehydration and weight loss. The ongoing monitoring and intervention by a dietitian is also important to help patients maintain their overall nutrition status and overcome eating problems throughout cancer therapy.

The link between nutrition and cancer prevention is recognized. The message that healthy food choices may reduce the risk of some types of cancer is discussed with patients in outpatient Nutrition Clinics and nutrition and cancer prevention handouts are available to patients in other clinics.

Evelyn Shinoda, MS RD
Nutrition and Food Service

Physical Medicine and Rehabilitation

The Physical Medicine and Rehabilitation Service (PM&RS) provides support to the VAPAHCS Cancer Program primarily through its multidisciplinary approach to patient care:

The PM&RS physiatrist provides consultation to address any rehabilitation needs of the oncology patient, as well as recommendations for further rehab care and therapy post discharge.

Physical Therapy and Occupational Therapy receive referrals from the Pain Management Program, PM&R Service, Hospice, Medical Oncology Clinic and Inpatient Services.

PM&RS has allocated a half-FTEE Occupational Therapy staff to join the team on the Hospice Program.

Occupational Therapy is essential in assessing ADL's, functional mobility, energy conservation, pain management, home evaluations, assessments for adaptive and durable medical equipment, grief counseling and family training.

Interventions provided to clients by Physical Therapy include; therapeutic exercise, functional and mobility training, manual therapy techniques, prescription, application and training in the use of assistive, adaptive, orthotic, protective, supportive and prosthetic devices, airway clearance techniques, wound management, electrotherapeutic modalities, physical agents and mechanical modalities, as well as family training.

Jeffrey Teraoka, MD
Chief, PM&RS

Recreation Therapy Service

Recreation Therapy Service has 56 staff, including music, art therapists, and RT assistants who provide innovative treatment modalities to patients diagnosed with various forms of cancer. The goals of these therapeutic interventions are to improve functional level and achieve optimal wellness through a comprehensive continuum of quality care.

The veterans seen in the Recreation Therapy Fitness and Wellness Clinic with a primary diagnosis of cancer receive a range of treatments including exercise instruction/therapy addressing de-conditioning as well as general strength and endurance. In addition, pain management, relaxation and stress management are derived benefits. Wellness programs include, but are not limited to: aquatic therapy, individualized exercise programs, cardio/universal weight equipment instruction, and facilitated exercise classes (aquatic and land based). Programs are based on a continuum of care through completion of an assessment, development of treatment programs with a wellness education emphasis, 1:1 therapeutic intervention, and transitioning patients into self-directed fitness participation if clinically appropriate.

Depending on patient's level of functioning and individual interests, recreation/creative arts therapists offer the following: a variety of modalities that address his/her cognitive, social, emotional, physical, and spiritual needs through the provision of 1:1 or group treatment programs, bedside activities, sensory stimulation (auditory, visual, tactile), animal-assisted therapy visits, and music therapy. Moreover, during the patient's stay, Recreation Therapy Service focuses on the importance of creating a home-like environment in order to facilitate making patients feel as comfortable as possible. One new intervention on the Hospice unit, Recreation Therapist, Jocelyn Reyes-Pagsolingan, has created a bedside program using the Ipad bringing the past, present, and future to those unable to get out of bed and creating reminiscence, engagement, and excitement as well as addressing his/her cognitive, social, emotional, and spiritual needs.

Music therapy interventions that are utilized with cancer patients include: songwriting, improvisation, guided imagery with music, lyric analysis, singing, instrument playing and relaxation techniques. Current music therapy on the hospice unit addresses the following 5 needs/areas:

Social- isolation, loneliness, boredom; music therapy can help veterans who are withdrawn become more engaged with others.

Emotional- depression, anxiety, anger, fear, frustration; music therapy can give veterans a safe, constructive outlet for emotions.

Cognitive- neurological impairments, disorientation, confusion; music therapy can help orient a veteran to the present time/place, and can also aid in reminiscence and memory.

Physical- pain, shortness of breath; music therapy can address pain through focusing the mind on a musical activity, therefore reducing the amount of attention given to the pain.

Spiritual- lack of spiritual connection, need for spiritually based rituals; music therapy can provide a spiritual connection through the singing of spiritual songs/hymns.

Within the VA PAHCS some veterans are faced with cancer while actively engaged in other VA programs. On such occasions the program's Recreation Therapist will adjust treatment approaches. Whatever involvement the veteran has through the Recreation Therapy component of that program, it will speak to concerns posed by their cancer as well as continuing to recognize their pre-existing treatment goal(s) as participants in that program. When partnering in treatment work the Recreation Therapist strives to provide service within the veteran's existing milieu or program structure while actively recognizing their cancer experience, thus honoring all facets of their current life in treatment.

In conclusion, Recreation Therapy Service strives to provide the highest quality of care via assisting patients and their families in acquiring skills and resources to better cope with the cancer diagnosis and treatment.

Tracy Marino
Administrative Officer
Recreation Therapy Service

Caroline Wyman, CTRS
Chief, Recreation Therapy Service

Smoking Cessation Support Service

A Smoking Cessation Task Force was initiated by the Director, Palo Alto VA Health Care System, through Quality Management in March, 1993. The Chairman of the Task Force appointed a Smoke Free Coordinator/Lead Smoking Clinician for each VA facility. The goal was to improve the state of smoking cessation treatment throughout the medical center. A Smoking Cessation Policy was developed and implemented. Since 1993, the Task Force has provided patients and staff with educational materials and has developed smoking cessation treatment programs.

Smoking Policy

The Smoking Policy, regarding where smokers may smoke on VA property, is set by the Clinical Executive Board and the Partnership Council. Recommendations for new policies come from the VA Central Office, VA staff and the Smoke Free Coordinator/Lead Smoking Clinician. Since October 1st, 1998, the Palo Alto VA Health Care System has adopted a policy of no smoking anywhere except approved sites. There are about five or more approved sites at Palo Alto, Menlo Park and Livermore Divisions, in addition to all parking lots.

Smoking Cessation Treatment

PAVA offers several smoking cessation treatment options. Tobacco cessation medications are available on the Formulary (including nicotine replacement, bupropion and varenicline). Primary Care Providers are able to order these medications and conduct smoking cessation on their own or refer their patients to one of our smoking cessation programs. Varenicline is used very cautiously and is reserved for smokers unable to quit with nicotine replacement or bupropion. Smoking Cessation Clinics are established at three Divisions of the Palo Alto Health Care System: Palo Alto, San Jose, and Stockton. Clinics permit patient self-referral. All clinics accept referrals by electronic consult. Services are also offered to patients in the domiciliary at Menlo Park.

<u>Palo Alto Division. (Covers both Palo Alto and Menlo Park outpatients)</u>: Call (650) 493-5000. After the computer voice answers the phone, press the number 1, then 1 again, and then extension 67915. Talk to or leave a message for Dr. Holly Cacciapaglia, requesting an appointment. Providers may send electronic consults to Smoking Cessation (PA). New patients meet most Tuesdays at 10:30 AM in MB3, Suite 350-Behavioral Medicine Clinic. Follow-up sessions are Tuesdays 9:00 to 10:30 AM in the same location. Call Dr. Cacciapaglia, x67915 with any questions.

San Jose Division: Patients may call Dr. Gary Miles at (408) 363-3000. After the computer voice answers the phone, press the number 1, then press the number 4, and then extension 73037. Talk to or leave a message for Dr. Miles, requesting an appointment. Dr. Miles meets new patients for smoking cessation on Fridays at 2:00 PM. Follow-up sessions are Fridays at 3:00pm. Providers may send an electronic consult to Smoking Cessation (SJ).

Stockton Division: Patients may call Dr. Hilary Keegan at (209) 946-3407. Talk to or leave a message for Dr. Keegan, requesting an appointment. Dr. Keegan meets new patients for smoking cessation on Thursdays at 11:00 AM. Follow-up sessions are Thursdays at 10:00 AM. Providers may send electronic consults to Smoking Cessation (STC).

Telequit: Patients who either live far from one of the three Smoking Cessation Outpatient Clinics or are otherwise unable to come to the clinic can be treated through Telequit, our phone-based program. Providers may send electronic consults to Telequit. Please verify that the patient's phone number is updated in CPRS prior to sending the consult. Nicotine replacement, bupropion, and varenicline are available.

Employee Smoking Cessation Treatment: Employees who are interested in quitting smoking can access services through Telequit and the smoking clinicians named above. As of September, 2010 it has become VHA policy to provide free over-the-counter formulations of nicotine replacement therapy to employees who are seeking assistance with quitting.

Health Education

The Smoking Cessation Task Force uses opportunities such as the Great American Smokeout, Health Fairs, and events through the Health Promotion Disease Prevention Committee as opportunities to provide information to patients and staff on the risks of smoking and benefits of quitting.

Holly Cacciapaglia, Ph.D
PAVAHCS Lead Smoking Clinician and
Clinical Psychologist

Social Work Service

Social Work Service is an integral part of the VA PAHCS Oncology team. Social Work Service will provide services and support to oncology patients in the outpatient clinic (including Ambulatory Infusion Center); this includes Oncology Clinic, ENT Clinic, General Surgery Oncology Clinic and Urology Clinic; the social worker will continue to follow these patients during admissions to PAD. In addition, the social worker will continue to coordinate with veterans and their families during IICU and MSICU admissions

The following is a list of some of the services offered:

Orientation: Social Work provides new Oncology Clinic patients with an orientation to the Oncology Clinic and the VA. All veterans new to the Oncology Clinic meet with the Oncology Social Worker; the New Patient Packet is reviewed at that time. The social worker is responsible for updating and distributing the New Patient Packet.

Assessments: The social worker will meet with all new oncology clinic patients to complete an initial psychosocial assessments which includes an evaluation of coping skills, support systems and financial needs. Veterans are given concrete information about the cancer program as well as emotional support and psychotherapeutic intervention when needed.

Concrete Needs: Social Work will assist veterans and families with applying for benefits, accessing community and VA resources for financial assistance, transportation, housing, at home assistance, food bank referrals, food stamps, Hometel and Fisher House referrals; VA waivers, and many other VA related forms that veterans must complete. Social Work will expedite the process of filing for Agent Orange claims (schedule the initial appointment and refer veteran to Veterans Service Office to file the Agent Orange Claim).

Social Work will also refer veterans to the American Cancer Society, the Leukemia Lymphoma Society and Cancer Care (transportation reimbursement, financial assistance, co-pay assistance). Social Work coordinates referrals to various community agencies (transportation, food, housing, and assistance).

Counseling: Social Work will assist veterans and families with coping with a cancer diagnosis and treatment. As part of this, Social Work will assist veterans with the Advance Directive, POLST and end of life discussions and planning.

Social Work now incorporates group psychotherapy (Cancer Forum) as part of the Oncology Team approach to cancer care. This group meets weekly and includes veterans and

families; it serves as a method of delivering ongoing education and support as well as psychotherapeutic intervention to our veterans. This group meets weekly.

Education: The Social Worker will provide education and information about cultural, familial and interpersonal issues that can impact styles of coping with cancer and treatment implications. Social Work will provide cancer literature provided by the American Cancer Society, Leukemia Lymphoma Society, National Cancer Institute and LiveStrong Foundation.

Community Resources: Social Work will provide information about community resources ranging from the American Cancer Society to Food Banks. The Social Worker will actively develop good relationships with the various community agencies that can assist our veterans.

Collaboration: The Social Worker will collaborate with Stanford Cancer Center to coordinate radiation schedules for our veterans. The coordination includes the Oncology Clinic, Hometel, Fisher House sub-acute unit inpatient programs, as well as Medical Respite/Little Orchard Shelter. Coordination of radiation treatment is an integral part of the social work function. In addition the Social Worker will work closely with the veteran's oncologist, ambulatory infusion team, behavioral medicine, chaplain services and families to provide the highest quality of care to our veterans.

Multi-Disciplinary Support: The Social Worker has instituted an ongoing support group for Ambulatory Infusion Center nursing staff. This group meets monthly. The focus is to provide support to AIC staff as they deal with seriously ill and dying veterans.

The social worker participates in the Inter Disciplinary Ambulatory Infusion Center meetings.

Social Work participated in the 2nd Generation VHA Cancer Care Collaborative (Head and Neck cancer). As part of the core team, the social worker attended three Learning Sessions (New Orleans, Indianapolis and Orlando). The VA-TAMMCS process was introduced and adopted. Two aims were successfully achieved and are currently being sustained. Of note, the storyboard put together by the team was a 3rd Place winner. Further, the members of this Collaborative team were recognized by the Director of the VAPAHCS for its achievements at the Cancer Collaborative.

Social Work is now an integral part of the 3rd Generation Cancer Care Collaborative. As a member of the team that will improve cancer care to lung cancer patients, social work brings a unique perspective to the team.

Social Work is now participating in the VA national effort to establish a VA Cancer Survivorship program; this initiative will develop a plan for VA system wide cancer survivorship plan.

The social worker also is a member of the Leukemia Lymphoma Society Patient Services Committee which is a community-wide group that discusses various cancer services available in Silicon Valley.

The social worker participates in the Association of Oncology Social Workers annual meeting and has presented at their national meeting held in St. Louis in May 2011

The social worker has been awarded the Oncology Social Worker-Certified (OSW-C) designation by the Association of Oncology Social Workers.

Karen L. Chwick, LCSW, OSW-C
Oncology Social Worker
VA Palo Alto Health Care System

Women Veterans

Overview:

The number of women Veterans users has increased significantly. The number of women Veterans using VHA services have doubled within the past decade, from 160,000 in FY00 to 315,000 in FY10 mostly due to influx of younger women. This growth has outpaced that of the male Veteran population. Women Veterans are substantially younger than men, average age 48 compared to 63. Some of the distinguishing characteristics of women Veterans are the higher use of primary care services and mental health services than men, the requirement for unique services such as reproductive healthcare, maternity care, menopausal needs, and the need for privacy, safety, and convenience. Women are more likely to carry a service-connected disability; in 2009 more than half of the women had a SC disability with a quarter of the women having a rating of more than 50%. Women's comprehensive health care – **complete primary care from one designated Women's Health Primary Care Provider at one site.** Comprehensive primary care is delivered to women in 3 distinct models of care: 1) Integrated primary care clinic, 2) Clinics in separate, but shared space, and 3) Comprehensive Women's Clinic. Comprehensive Women's Health Centers are ***Models*** of PACT where primary care is delivered in addition to mental health, social work, gynecology, breast care, other specialty services, as well as nutrition and pharmacy. Regardless of model, Women's health services are generally considered to be integrated within general Primary Care and often share many common resources. The mission is to train one provider at each site that is knowledgeable and interested in providing care to women veterans. To meet this goal providers caring for female patients are being trained in gender-specific topics.

Program Profile:

The Palo Alto Women's Health Program oversees the implementation of comprehensive care for all women Veterans (as outlined in Policy 1330.01, Delivery of Health Care for women Veterans) as well as Tricare and ChampVA patient population through the VA PAHCS. Designated Women's Health Clinicians provide comprehensive primary care to women at all of the CBOC sites.

The Women's Health Center(WHC) offers primary care, gynecology and mental health services with specialty care services in comprehensive breast care, endocrinology, rheumatology, musculoskeletal, physical therapy, physical medicine and rehabilitation, as well as acupuncture and yoga. In addition, a comprehensive clinic evaluates OEF/OIF women veterans. The WHC has a full-time psychologist as well as part-time psychiatric and social work support. Several groups are offered to women veterans such as Women's Wellness group, ACT, AA, Mindfulness and Relaxation group as well as Spirituality group.

VPHCS provides Mammography services through fee care arrangements. Several mammography sites have been chosen strategically which ensures that these services are available within 50 miles of a patient's residence as suggested in policy 1330.01. Cervical

cancer screening is performed as part of the comprehensive primary care by designated WH providers including the CBOCs. Some patients continue to come to the WHC to obtain their gender specific care. Abnormal findings on pap smears and mammograms are tracked and referred to appropriate health services for follow up, and management. Bone density testing is available at Palo Alto and Livermore.

Privacy and safety is key for women veterans and all efforts are made at VAPHC to ensure that all veterans including women veterans receive care in a safe and private environment and with dignity. Maternity care is not available within the VAPHCS but a comprehensive process ensures that all women Veterans receive OB care close to their residence through a fee care process.
The WH program is part of the PACT Initiative and is implementing the PACT principles within the WHC.

Providers:

WHC providers:

Agrawal, Reena	PM&R
Akki, Suvarna	GMC
Butner, Alfred	WHC
Cohen, Edward	GYN
Chung, Lorinda	RHEUM
Frayne, Susan	GMC
Iqbal, Samina	WHC
Jain, Shaili	PSYCH
Lai, Sandy	PM&R
Manning,Beth	PSYCH
Meng, Candice	PT
Ramchandani,Nina	WHC
Thrailkill, Ann	WHC

Designated WH providers at CBOCs

LD	MONT	STK	SJ
Obrien,Loretta Rademaker,Irene Teresi,Connie Yu,Betty	Allen,Eric Roberts, Mary Sasson,Nicolas Mudge, Dawn Kang, Micheal	Bautista,MaryRose Choudhury,Ranjita Palapati,Kavita Prabhu,Anita Seifoddini,Mahnoosh Tapia,Miriam	Nguyen-Duc, Nha-Ai Saxena, Madhur Li,David Delzeit,Monica Liang, Albert Chardos,John Tseng, Steve
Women' s Health Clinic Providers PAD	SOC	MOC	FRC
Iqbal,Samina Ramchandani,Nina Thrailkill,Ann Akki, Suvarna	Brocchini,Leslie Villanueva,Rochelle Su, David Mathur, Jim	Libao,Elizabeth Prabhakar,Krishna	Mehta,Shruti Kim,Seanna Kim, Clifford
CAC			
Barr, Donna			

Statistics:

There were seven GYN cancers from October 1, 2009 to October 1, 2010 and 9 newly diagnosed breast cancers. 6 were female and 3 were male. All breast cancer patients are followed in the women's breast clinic by Dr. Alfred Butner and Dr. Daphne Ly as well as by oncology clinic. We fee-based out 36 women veterans for OB care by local providers in the community in 2010.

Compliance and Satisfaction:

Patient satisfaction continues to be very high for services offered in the Women's Health Center. Followup on abnormal pap smears and complicated GYN issues and IFC referrals are met within two weeks by our gynecologist. All women are notified of pap smear results by letter in a timely manner and abnormal results are given to the patient by phone. All mammogram results from fee-based sites are mailed to patients, and patients with abnormal results are contacted in person for follow up. Abnormal results are tracked closely. Nurse liaisons at each CBOC track mammograms ordered and completed at their sites and are responsible for sending results to Linda Kleinsasser, Mammography Coordinator. Results are then scanned into Vista Imaging by our Program Assistant. Followup of all abnormals, procedures and surgeries are tracked by Linda Kleinsasser, Dr. Iqbal, and our Program Assistant, Nicole Guerrero.

The women's health team meets monthly to discuss options and recommendations for improving services and quality of care to women veterans.

There are several research studies currently in progress in the women's health program on pertinent health topics relevant to women veterans' health care. We will continue to provide comprehensive care to women veterans and continue our efforts to improve services. We will continue to meet performance measures with pap smear, mammography screening, and LDL levels and to offer quality care and outreach services to women veterans.

Ann Thrailkill, RNP, MSN

2010 Cancer Conferences

The VAPAHCS Cancer Conference provides clinical information, pathologic staging, and treatment recommendations for the patient's disease. It functions as a multidisciplinary diagnostic and oncologic team for case review. The Cancer Conference Board is comprised of a multidisciplinary group of oncology attending physicians, fellows, residents, physician assistants, nurses, medical students and other specialists from Diagnostic Radiology, Pathology, Radiation Oncology and General Surgery. The format includes a complete presentation of medical history, physical findings, clinical course, radiographic studies and pathological interpretation. The specialists provide multidisciplinary input to resolve complex management problems. They identify patients eligible for chemotherapy protocol or radiation treatment. The conference also provides an education forum for all medical staff. One credit hour of Continuing Medical Education (CME) by the Stanford University School of Medicine is provided for the attendees of the Multidisciplinary CME Tumor Board Conference held on the 4th Monday of every month.

A total of 67 Cancer Conferences were held in 2010. 177 analytic cases were presented. This represents 29% of our annual analytic caseload. Out of the 177 cases, 175 were prospective cases, which equal to 99% of the total analytic cases presented. Average physician attendance was 95%. The standard of American College of Surgeons' Commission on Cancer (CoC) requires at least 10% of the analytic caseload and at least 75% of prospective cases to be presented annually. We met and exceeded the CoC requirements. We also met our physician attendance goal set at 80%.

The following are the schedules for VAPAHCS Cancer Conferences.

Genitourinary (GU) TB Cancer Conference meets on the 3rd Tuesday of the month in the Pathology Conference Room, Building 100, 4th Floor at 4:00 PM.

Liver TB Cancer Conference meets on the 4th Thursday of the month in the Diagnostic Radiology Conference Room (DRC) at 4:00 PM.

Multidisciplinary CME Cancer Conference meets on the 4th Monday of the month in the Auditorium at 12 PM.

Otolaryngology (ENT) Cancer Conference meets every Thursday at Stanford Cancer Center, Clinic B at 10 AM.

Pulmonary/ Thoracic TB Cancer Conference meets on the 3rd Thursday of the month in the DRC Conference Room at 4:00 PM.

Patient Care Conference_meets on the 2nd and 4th Tuesday of the month in the Surgical Conference Room, Building 100, 3rd Floor at 4:00 PM.

Carole Fong, BSN, RN
Cancer Program Coordinator

Bladder Cancer Patient Care Evaluation Study (2001 – 2010)

This report surveys the Veterans Affairs Palo Alto Health Care System (VAPAHCS) experience with bladder cancer from 2001-2010. The epidemiology, demographics, staging, treatment and survival data is presented from the previous 5 years (2006 – 2010) and also compared with the National Cancer Database Benchmarks from 2000 to 2008. Bladder cancer represents a clinical challenge, as tumors range from small superficial lesions to aggressive, invasive and life-threatening tumors. Additionally, bladder cancer often occurs in an older population where optimal treatment decisions are not always clear. Finally, bladder cancer has a high recurrence rate and more than half of patients will experience multiple bladder tumors during their lifetime. The data from our experience with bladder cancer treatment will be used to educate our staff, help plan our approaches to evaluation and treatment, and to expedite care for our Veterans.

Table 1. Bladder cancer cases treated at VAPAHCS.

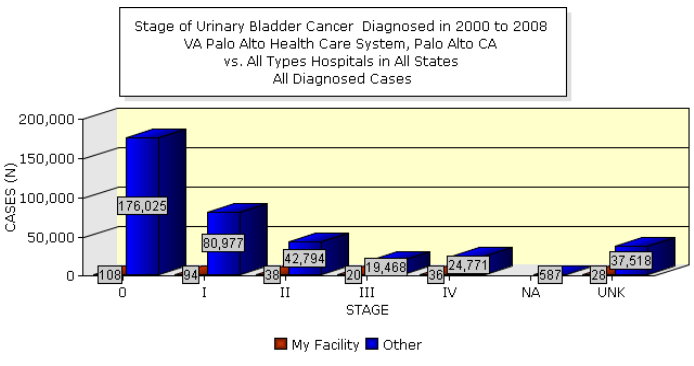
Year	# of Cases
2001	28
2002	31
2003	39
2004	38
2005	52
2006	40
2007	37
2008	34
2009	39
2010	40

Results

Bladder cancer is the most commonly diagnosed and treated cancer tracked by the VAPAHCS tumor registry. Over the period from 2001 – 2010, an average of 38 patients were treated for bladder cancer. (**Table 1**)

Approximately 62% of patients diagnosed with bladder cancer at PAVAHCS, were diagnosed with either T0 (33%) or T1 (29%) disease. Nationally, more than 67% of patients are diagnosed at this early stage. This difference likely reflects our higher risk patient population. (**Figure 1**) Comparison with the NCDB also reveals that we have a higher proportion of patients diagnosed at metastatic and locally invasive Stage 4 disease.

Figure 1. Bladder Cancer Stage at Diagnosis and comparison with NCDB data.



	0	I	II	III	IV	NA	UNK
My Facility	108	94	38	20	36		28
Other	176,025	80,977	42,794	19,468	24,771	587	37,518

Stage of Urinary Bladder Cancer Diagnosed in 2000 to 2008

VA Palo Alto Health Care System, Palo Alto CA

vs. All Types Hospitals in All States

All Diagnosed Cases

#	Stage	My (N)	Oth. (N)	My (%)	Oth. (%)
1.	0	108	176025	33.33%	46.06%
2.	I	94	80977	29.01%	21.19%
3.	II	38	42794	11.73%	11.2%
4.	III	20	19468	6.17%	5.09%
5.	IV	36	24771	11.11%	6.48%
6.	NA	.	587	.	0.15%
7.	UNK	28	37518	8.64%	9.82%
	Col. TOTAL	324	382140	100%	100%

Evaluation and Treatment

Primary definitive treatment of superficial bladder cancer can include endoscopic resection of the tumor with or without installation of intravesicular chemotherapy. (**Figure 2**) Adjuvant therapy may also include additional intravesicular chemotherapy regimens, particularly for superficial but high risk patients (stage 1). For muscle-invasive disease, surgery is the primary definitive treatment when no evidence of metastasis is present. Metastatic patients are treated with systemic chemotherapy and may receive radiation. Patients treated at VAPAHCS represent each of these treatment categories. (**Figure 3**) When compared with the NCDB, fewer patients received surgery, more patients received primary hormonal therapy, and nearly one quarter of patients chose surveillance. Potential explanations for this treatment may include the higher incidence of comorbid conditions in the veteran population, or patient interest in non-surgical treatment options. More detailed analysis of the patients from 2005 – 2009, provides a breakdown of recent primary treatments received. (**Figure 5**) Surgical volume has consistently increased since 2006 at VAPAHCS and is likely due to the installation of the daVinci surgical robot and a resultant increase in referrals to our facility. We have not seen a significant change in the number of patients undergoing non-surgical treatments over that same time period.

Figure 2. Initial treatment of stage 0 - 2 bladder cancer.

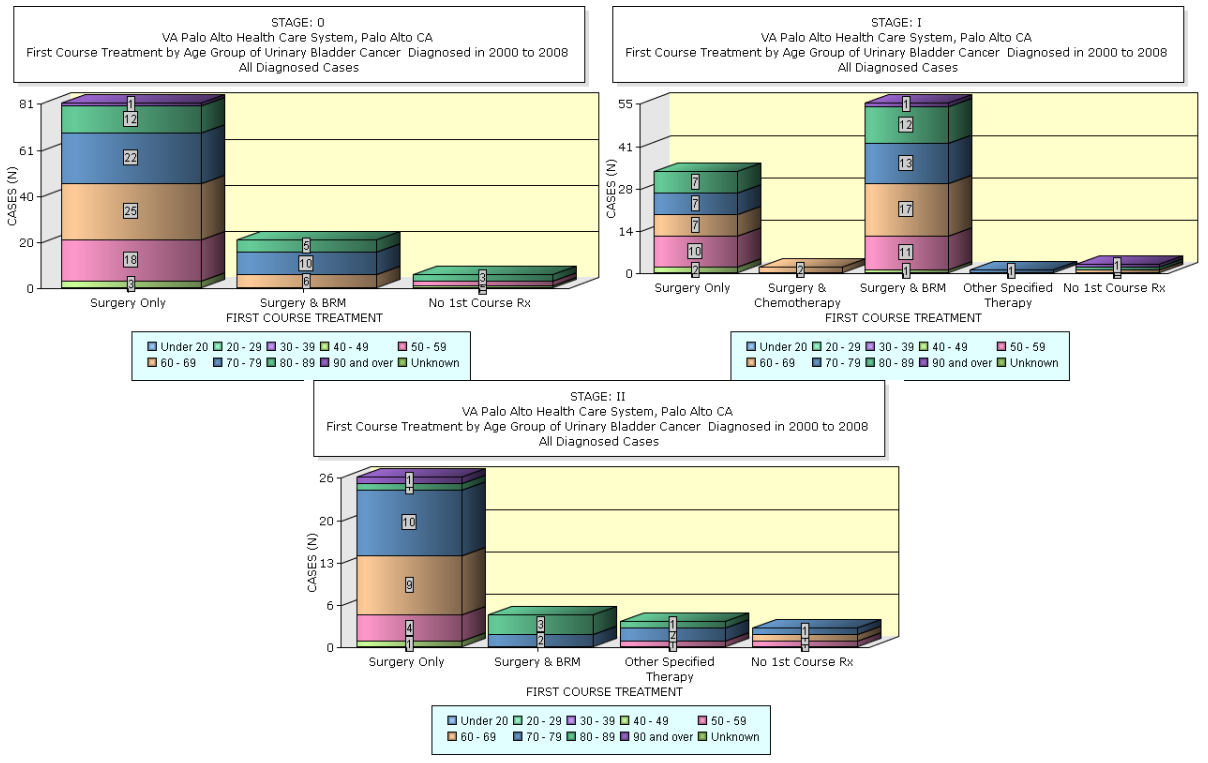
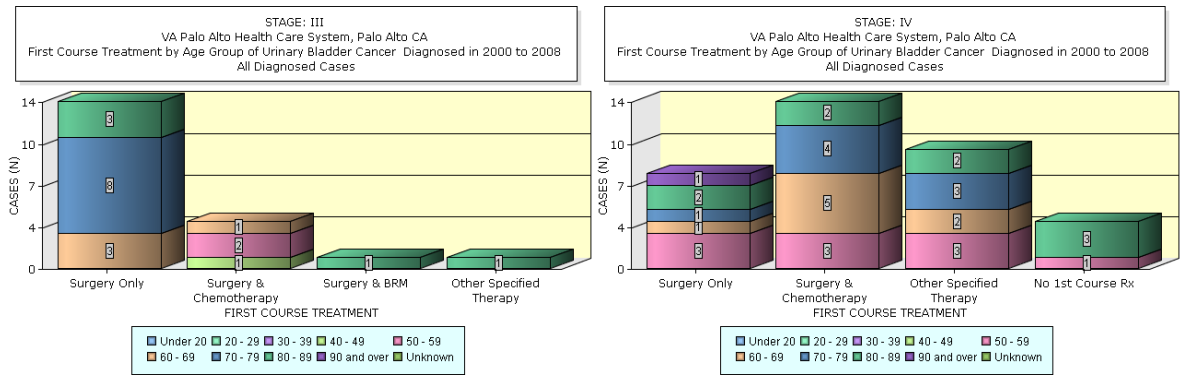


Figure 3. Initial treatment for stage 3 and 4 bladder cancer.



Survival

The survival outcome for patients included in the NCDB by stage (**Figure 4**) can be compared with survival for patients diagnosed at VAPAHCS from 2003 (**Figure 5**). Patients treated at VAPAHCS appear to have comparable or improved 5-year survival rates when compared with national cases. This is particularly apparent in stage-2 and -3 cases and is a testimony to the multidisciplinary team treating veterans with bladder cancer. This is particularly encouraging as intervention can dramatically improve patient outcomes for this group.

Figure 4. Survival by stage for patients in the NCDB.

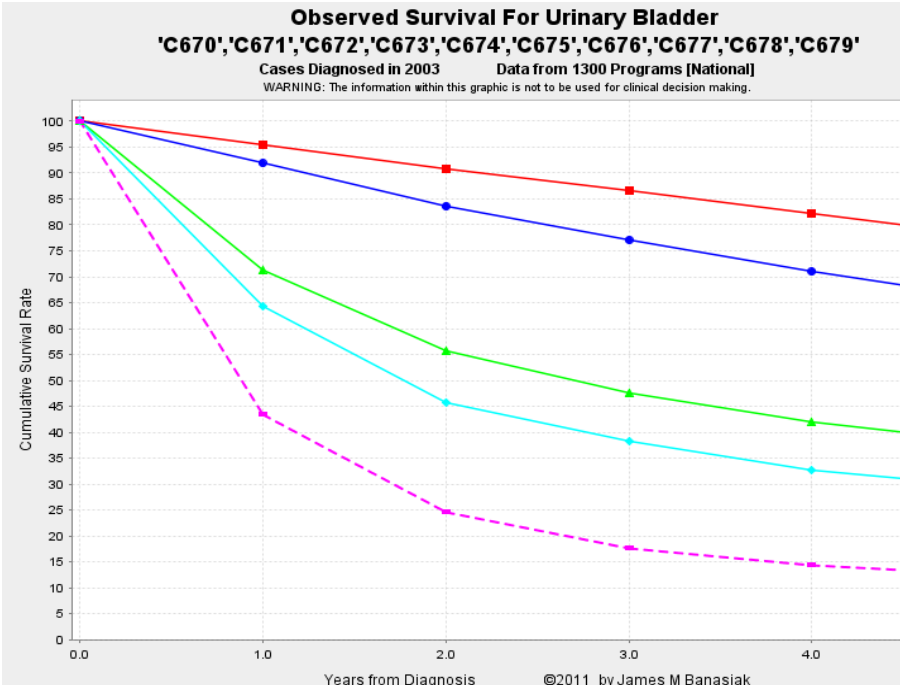
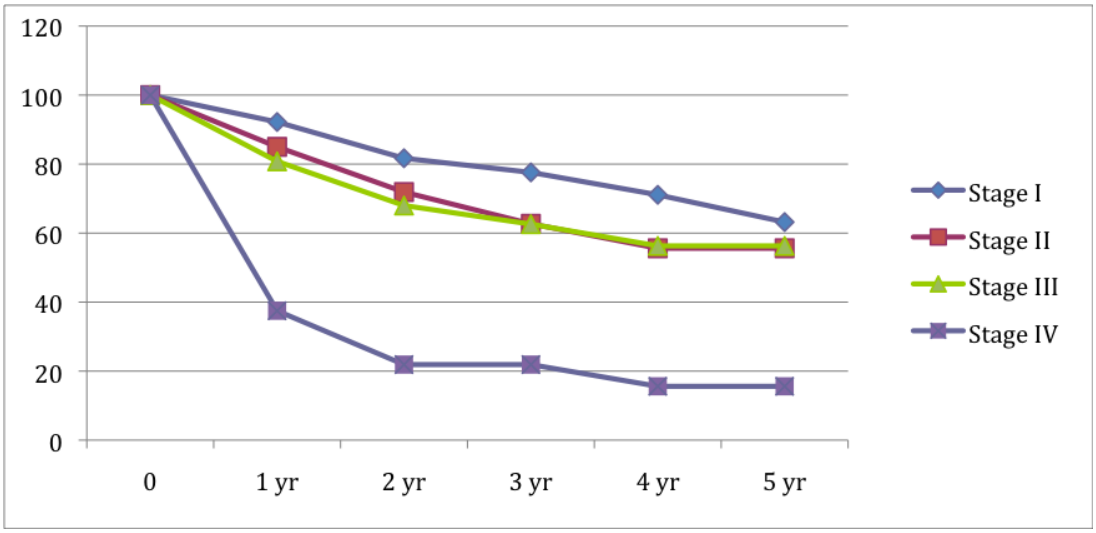


Figure 5. Survival by stage for VAPAHCS patients diagnosed in 2003.



Summary

This most recent 10-year experience with bladder cancer patients documents the epidemiology and outcomes for patients diagnosed and treated at the VAPAHCS. The data shows variety of patients evaluated by our facility, and the overall survival of our patients. While the optimal treatment for bladder cancer patients is still being developed, this data will allow us to provide our patients with prognostic information that will allow us to individualize the treatment plan considering each patient's disease and treatment preferences.

John Leppert, MD
Assistant Professor of Urology, Stanford University
Director of Urologic Oncology, VAPAHCS
Cancer Liaison Physician, VAPAHCS